



Cambridge Isotope  
Laboratories, Inc.  
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RESEARCH PRODUCTS

# PeptiQuant™ Plus Biomarker Assessment Kits

For Targeted Quantitative  
Proteomics



Cambridge Isotope Laboratories, Inc. is pleased to offer PeptiQuant™ Plus biomarker assessment kits (BAKs) for the targeted and precise quantitation of  $\geq 125$  proteins in human and mouse plasma samples.<sup>1-9</sup> These PeptiQuant kits utilize a well-defined, bottom-up LC-MS/MS methodology together with heavy (stable isotope-labeled standards, SIS) and light (natural, NAT) peptide standards for the quantitation of moderate-to-high abundance proteins. The peptides have been carefully selected, formulated, and characterized to serve as effective, molecular surrogates for their corresponding proteins. The proteins are candidate disease markers (e.g., cancer, cardiovascular) that are suitable for biomarker discovery and verification studies. All assays have been validated according to the complete set of CPTAC (Clinical Proteomic Tumor Analysis Consortium) guidelines and are available for viewing on the CPTAC Assay Portal.<sup>10</sup>

Kit Type	Optimized Platforms Available				
	6490/6495 QqQ	6545 Q-TOF	QTRAP® 6500	Q Exactive™ Plus	Xevo TQ-XS
Human BAK-125	■		■	■	■
Mouse BAK-125	■		■	■	
Mouse BAK-125-2	■	■		■	
Mouse BAK-125-3	■			■	
Human BAK-270	■		■	■	
Human Cancer BAK-50	■			■	

Most kits are available for 20, 50, and 100 samples.

**Note:** The -2 and -3 demarcations in the catalog number reflect an alternate set of 125 target proteins. Please inquire if an alternate LC-MS/MS platform is desired from the current panel offerings.

## Example References

1. Michaud, S.A.; Pětrošová, H.; Sinclair, N.J.; et al. **2024**. Multiple reaction monitoring assays for large-scale quantitation of proteins from 20 mouse organs and tissues. *Commun Biol*, 7(1), 6-17.
2. Mohammed, Y.; Goodlett, D.; Borchers, C.H. **2023**. Absolute quantitative targeted proteomics assays for plasma proteins. *Methods Mol Biol*, 2628, 439-473.
3. Gaither, C.; Popp, R.; Zahedi, R.P.; et al. **2022**. Multiple reaction monitoring-mass spectrometry enables robust quantitation of plasma proteins regardless of whole blood processing delays that may occur in the clinic. *Mol Cell Proteomics*, 21(5), 100212-100223.
4. Brzhozovskiy, A.; Kononikhin, A.; Bugrova, A.E.; **2022**. The parallel reaction monitoring-parallel accumulation-serial fragmentation (prm-PASEF) approach for multiplexed absolute quantitation of proteins in human plasma. *Anal Chem*, 94(4), 2016-2022.
5. Percy, A.J.; Borchers, C.H. **2021**. Detailed method for performing the ExSTA approach in quantitative bottom-up plasma proteomics. *Methods Mol Biol*, 2228, 353-384.
6. Bhardwaj, M.; Weigl, K.; Tikk, K.; et al. **2020**. Multiplex quantitation of 270 plasma protein markers to identify a signature for early detection of colorectal cancer. *Eur J Cancer*, 127, 30-40.
7. Gaither, C.; Popp, R.; Mohammed, Y.; et al. **2020**. Determination of the concentration range for 267 proteins from 21 lots of commercial human plasma using highly multiplexed multiple reaction monitoring mass spectrometry. *Analyst*, 10, 3449-3760.

## Kit Contents

- 4 vials of starting material (lyophilized)
  - Vial 1 ("S" on cap): SIS peptide mix (for spiking into standard curve, QC, and experimental sample digests)
  - Vial 2 (clear cap): NAT peptide mix (for spiking into standard curve and QC sample digests)
  - Vial 3 (purple cap): TPCK-treated trypsin
  - Vial 4 (green cap): BSA
- USB containing user manual, target details (with specifications), vendor-specific acquisition method, and Skyline analysis file

## Features and Benefits

- CPTAC-certified assays
  - SIS and NAT peptides for each target protein
  - Robust and diverse protein quantitation
  - Reduces development time and cost
8. Michaud, S.A.; Sinclair, N.J.; Pětrošová, H.; et al. **2018**. Molecular phenotyping of laboratory mouse strains using 500 multiple reaction monitoring mass spectrometry plasma assays. *Commun Biol*, 1, 78.
  9. Mohammed, Y.; Goodlett, D.; Borchers, C.H. **2023**. Absolute quantitative targeted proteomics assays for plasma proteins. *Methods Mol Biol*, 628, 439-473.
  10. Whiteaker, J.R.; Halusa, G.N.; Hoofnagle, A.N.; et al. **2014**. CPTAC Assay Portal: a repository of targeted proteomic assays. *Nat Methods*, 11(7), 703-704.

## Application Note

Percy, A.J.; Trouvé, R.; Lehmann, S.; Hirtz, C.; Vialaret, J. **2021**. Translation and implementation of the PeptiQuant™ Plus Human Plasma BAK-270. (CIL application note #50)

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## PeptiQuant Plus BAK Panels

### Human Plasma BAK-125

Protein	UniProt Acc.
78 kDa glucose-regulated protein	P11021
Adipocyte plasma membrane-associated protein	Q9HDC9
Adiponectin	Q15848
Afamin	P43652
$\alpha$ -1-acid glycoprotein 1	P02763
$\alpha$ -1-antichymotrypsin	P01011
$\alpha$ -1-antitrypsin	P01009
$\alpha$ -1B-glycoprotein	P04217
$\alpha$ -2-antiplasmin	P08697
$\alpha$ -2-HS-glycoprotein	P02765
$\alpha$ -2-macroglobulin	P01023
Antithrombin-III	P01008
Apolipoprotein A-I	P02647
Apolipoprotein A-II	P02652
Apolipoprotein A-IV	P06727
Apolipoprotein B-100	P04114
Apolipoprotein C-I	P02654
Apolipoprotein C-II	P02655
Apolipoprotein C-III	P02656
Apolipoprotein C-IV	P55056
Apolipoprotein D	P05090
Apolipoprotein E	P02649
Apolipoprotein L1	O14791
Apolipoprotein M	Q95445
Apolipoprotein(a)	P08519
Attractin	O75882
$\beta$ -2-glycoprotein 1 (Apolipoprotein H)	P02749
$\beta$ -Ala-His dipeptidase	Q96KN2
Biotinidase	P43251
Cadherin-13	P55290
Carbonic anhydrase 1	P00915
Carboxypeptidase B2	Q96IY4
Cathelicidin antimicrobial peptide	P49913
Cation-independent mannose-6-phosphate receptor	P11717
CD5 antigen-like	O43866
Ceruloplasmin	P00450
Cholinesterase	P06276
Clusterin (Apolipoprotein J)	P10909
Coagulation factor V	P12259
Coagulation factor VIII	P00451
Coagulation factor IX	P00740
Coagulation factor X	P00742

Protein	UniProt Acc.
Coagulation factor XII	P00748
Complement C1q subcomponent subunit B	P02746
Complement C1q subcomponent subunit C	P02747
Complement C1r subcomponent	P00736
Complement C1r subcomponent-like protein	Q9NZP8
Complement C1s subcomponent	P09871
Complement C2	P06681
Complement C3	P01024
Complement C5	P01031
Complement component C7	P10643
Complement component C9	P02748
Complement factor B	P00751
Complement factor H	P08603
Complement factor I	P05156
Corticosteroid-binding globulin	P08185
Cystatin-C	P01034
Endothelial protein C receptor	Q9UNN8
Fetuin-B	Q9UGM5
Fibrinogen $\alpha$ chain	P02671
Fibrinogen $\beta$ chain	P02675
Fibrinogen $\gamma$ chain	P02679
Fibronectin	P02751
Fibulin-1	P23142
Galectin-3-binding protein	Q08380
Gelsolin	P06396
Glutathione peroxidase 3	P22352
Haptoglobin	P00738
Hemoglobin subunit $\alpha$	P69905
Hemopexin	P02790
Heparin cofactor 2	P05546
Hepatocyte growth factor-like protein	P26927
Hyaluronan-binding protein 2	Q14520
Ig $\mu$ chain C region	P01871
Insulin-like growth factor I	P05019
Inter- $\alpha$ -trypsin inhibitor heavy chain H2	P19823
Intercellular adhesion molecule 1	P05362
Interleukin-10	P22301
Kallistatin	P29622
Keratin type I cytoskeletal 10	P13645
Keratin-type II cytoskeletal 2 epidermal	P35908
Kininogen-1	P01042

Protein	UniProt Acc.
Leucine-rich $\alpha$ -2-glycoprotein	P02750
Lipopolysaccharide-binding protein	P18428
L-selectin	P14151
Lysozyme C	P61626
Mannan-binding lectin serine protease 1	P48740
Mannan-binding lectin serine protease 2	O00187
Metalloproteinase inhibitor 2	P16035
Myeloblastin	P24158
Peroxioredoxin-2	P32119
Phosphatidylinositol-glycan-specific phospholipase D	P80108
Phospholipid transfer protein	P55058
Pigment epithelium-derived factor	P36955
Plasma protease C1 inhibitor	P05155
Plasma serine protease inhibitor	P05154
Plasminogen	P00747
Plasminogen activator inhibitor 1	P05121
Pregnancy zone protein	P20742
Protein AMBP	P02760
Protein S100-A9	P06702
Protein Z-dependent protease inhibitor	Q9UK55
Prothrombin	P00734
Retinol-binding protein 4	P02753
Serotransferrin	P02787
Serum albumin	P02768
Serum paraoxonase/arylesterase 1	P27169
Serum paraoxonase/lactonase 3	Q15166
SPARC	P09486
Tenascin	P24821
Tenascin-X	P22105
Thrombospondin-1	P07996
Thrombospondin-4	P35443
Thyroxine-binding globulin	P05543
Tissue factor pathway inhibitor	P10646
Tissue-type plasminogen activator	P00750
Transferrin receptor protein 1	P02786
Transthyretin	P02766
Vascular cell adhesion protein 1	P19320
Vasorin	Q6EMK4
Vitamin K-dependent protein S	P07225
Vitamin K-dependent protein Z	P22891
Vitronectin	P04004
Zinc- $\alpha$ -2-glycoprotein	P25311

## Mouse Plasma BAK-125

Protein	UniProt Acc.
78 kDa glucose-regulated protein	P11021
Adipocyte plasma membrane-associated protein	Q9HDC9
Adiponectin	Q15848
Afamin	P43652
$\alpha$ -1-acid glycoprotein 1	P02763
$\alpha$ -1-antichymotrypsin	P01011
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Complement C1q subcomponent subunit C	P02747
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Fibrinogen $\beta$ chain	P02675
Fibrinogen $\gamma$ chain	P02679
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Serotransferrin	P02787
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Serum paraoxonase/arylesterase 1	P27169
Serum paraoxonase/lactonase 3	Q15166
SPARC	P09486
Tenascin	P24821
Tenascin-X	P22105
Thrombospondin-1	P07996
Thrombospondin-4	P35443
Thyroxine-binding globulin	P05543
Tissue factor pathway inhibitor	P10646
Tissue-type plasminogen activator	P00750
Transferrin receptor protein 1	P02786
Transthyretin	P02766
Vascular cell adhesion protein 1	P19320
Vasorin	Q6EMK4
Vitamin K-dependent protein S	P07225
Vitamin K-dependent protein Z	P22891
Vitronectin	P04004
Zinc- $\alpha$ -2-glycoprotein	P25311

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## Mouse Plasma BAK-125-2

Protein	UniProt Acc.
26S proteasome non-ATPase regulatory subunit 9	Q9CR00
40S ribosomal protein S2	P25444
Actin, aortic smooth muscle	P62737
$\alpha$ -2-macroglobulin receptor-associated protein	P55302
$\alpha$ -actinin-1	Q7TPR4
$\alpha$ -amylase 1	P00687
$\alpha$ -synuclein	O55042
Apolipoprotein B-100	E9Q414
ATP synthase subunit d, mitochondrial	Q9DCX2
$\beta$ -1,4-galactosyltransferase 1	P15535
$\beta$ -2-glycoprotein 1	Q01339
$\beta$ -enolase	P21550
Bleomycin hydrolase	Q8R016
Cadherin-1	P09803
Carbonic anhydrase 3	P16015
Carboxylesterase 1C	P23953
Carboxylesterase 3A	Q63880
Cathepsin S	O70370
Cathepsin Z	Q9WUU7
Cell growth regulator with EF hand domain protein 1	Q8R1U2
Chitotriosidase-1	Q9D7Q1
Cholinesterase	Q03311
Chromogranin-A	P26339
Clusterin	Q06890
Coagulation factor VII	P70375
Coagulation factor IX	P16294
Cofilin-1	P18760
Collagen $\alpha$ -1(I) chain	P11087
Collagen $\alpha$ -1(III) chain	P08121
Complement component C8 $\alpha$ chain	Q8K182
Complement component C9	P06683
Complement factor H	P06909
Core histone macro-H2A.2	Q8CCK0
Cystatin-C	P21460
Cytochrome c, somatic	P62897
Di-N-acetylchitobiase	Q8R242
Dyslexia-associated protein KIAA0319-like protein	Q8K135
Dystroglycan	Q62165
EF-hand domain-containing protein D2	Q9D8Y0
EGF-containing fibulin-like extracellular matrix protein 1	Q8BPB5
Electron transfer flavoprotein subunit $\beta$	Q9DCW4
Elongation factor 1- $\alpha$ 1	P10126
Elongation factor 1- $\beta$	O70251
Endoplasmic reticulum aminopeptidase 1	Q9EQH2
Eukaryotic translation initiation factor 3 subunit E	P60229
Ezrin	P26040
Fibrinogen $\alpha$ chain	E9PV24
Ficolin-1	O70165
Fumarylacetoacetase	P35505
Galectin-1	P16045

Protein	UniProt Acc.
Glucosidase 2 subunit $\beta$	O08795
Glutathione reductase, mitochondrial	P47791
Glutathione S-transferase $\mu$ 1	P10649
Glycerol-3-phosphate phosphatase	Q8CHP8
Granulins	P28798
Hemoglobin subunit $\alpha$	P01942
Hemoglobin subunit $\zeta$	P06467
Hepatocyte growth factor activator	Q9R098
Ig salt chain C region	P01878
Ig heavy chain V region 102	P01750
Ig heavy chain V region MOPC 47A	P01786
Ig $\kappa$ chain V19-17	P01633
Ig $\kappa$ chain V-II region 7S34.1	P01630
Ig $\kappa$ chain V-III region PC 2154	P01674
Ig $\kappa$ chain V-V region MOPC 149	P01636
Ig $\kappa$ chain V-V region MOPC 173	P01643
Ig $\mu$ chain C region	P01872
Insulin-like growth factor I	P05017
Keratin, type I cytoskeletal 14	Q61781
Keratin, type I cytoskeletal 16	Q9Z2K1
Keratin, type II cytoskeletal 2 epidermal	Q3TTY5
Keratin, type II cytoskeletal 5	Q922U2
Kunitz-type protease inhibitor 1	Q9R097
Lactoylglutathione lyase	Q9CPU0
Low molecular weight phosphotyrosine protein phosphatase	Q9D358
L-selectin	P18337
Lysosomal $\alpha$ -mannosidase	O09159
Mesothelin	Q61468
Murinoglobulin-1	P28665
N(G),N(G)-dimethylarginine dimethylaminohydrolase 1	Q9CWS0
Neural cell adhesion molecule 1	P13595
Nucleobindin-1	Q02819
Nucleosome assembly protein 1-like 4	Q78ZA7
Out at first protein homolog	Q8QZR4
Pancreatic $\alpha$ -amylase	P00688
Papilin	Q9EPX2
Perilipin-3	Q9DBG5
Peroxisomal oxidase	O08807
Peroxisomal oxidase	O08709
Platelet-activating factor acetylhydrolase	Q60963
Plexin domain-containing protein 2	Q9DC11
Profilin-1	P62962
Prolow-density lipoprotein receptor-related protein 1	Q91ZX7
Properdin	P11680
Proteasome activator complex subunit 2	P97372
Proteasome subunit $\alpha$ type-5	Q9Z2U1
Proteasome subunit $\alpha$ type-6	Q9QUM9
Proteasome subunit $\beta$ type-1	O09061
Proteasome subunit $\beta$ type-4	P99026
Protein DEK	Q7TNV0
Proteoglycan 4	Q9JIM9
P-selectin	Q01102
Pyruvate kinase PKM	P52480

Protein	UniProt Acc.
Radixin	P26043
Serine protease inhibitor A3C	P29621
Serine protease inhibitor A3M	Q03734
Serine protease inhibitor A3N	Q91WP6
Serum amyloid A-4 protein	P31532
Sorbitol dehydrogenase	Q64442
SPARC	P07214
Spermine oxidase	Q99K82
TBC1 domain family member 10A	P58802
Thioredoxin	P10639
Thrombospondin-1	P35441
Thyroxine-binding globulin	P61939
Transaldolase	Q93092
Transcobalamin-2	O88968
Transketolase	P40142
Translocon-associated protein subunit $\alpha$	Q9CY50
Transthyretin	P07309
Tropomyosin $\alpha$ -1 chain	P58771
Ubiquitin-conjugating enzyme E2 N	P61089
Ubiquitin-like protein ISG15	Q64339
Uromodulin	Q91X17
WD repeat-containing protein 1	O88342

## Mouse Plasma BAK-125-3

Protein	UniProt Acc.
14-3-3 protein $\zeta$	O70456
26S protease regulatory subunit 6A	O88685
40S ribosomal protein S20	P60867
60 kDa heat shock protein, mitochondrial	P63038
6-phosphogluconolactonase	Q9CQ60
Actin, cytoplasmic 2	P63260
ADAMTS-like protein 4	Q80T21
Adipolin	Q8R2Z0
$\alpha$ -1-acid glycoprotein 1	Q60590
$\alpha$ -1-antitrypsin 1-2	P22599
$\alpha$ -1-antitrypsin 1-5	Q00898
$\alpha$ -2-macroglobulin-P	Q6GQT1
$\alpha$ -hemoglobin-stabilizing protein	Q9CY02
Aminoacyl tRNA synthase complex-interacting multifunctional protein 1	P31230
Angiogenin	P21570
Angiopoietin-1 receptor	Q02858
Apolipoprotein A-I	Q00623
Apolipoprotein E	P08226
Arginase-1	Q61176
ATP synthase subunit $\beta$ , mitochondrial	P56480
Atrial natriuretic peptide receptor 1	P18293
$\beta$ -2-microglobulin	P01887
Bifunctional purine biosynthesis protein PURH	Q9CWJ9
Calpastatin	P51125
CapZ-interacting protein	Q3UZA1
Carbonic anhydrase 1	P13634
Carboxylesterase 1D	Q8VCT4
Carboxypeptidase N subunit 2	Q9DBB9
Cathepsin B	P10605
Caveolae-associated protein 2	Q63918
CD97 antigen	Q9Z0M6
Coactosin-like protein	Q9CQI6
Coiled-coil domain-containing protein 25	Q78PG9
Collagen $\alpha$ -1(XII) chain	Q60847
Collagen $\alpha$ -2(XI) chain	Q64739
Complement C1q subcomponent subunit B	P14106
Complement C1s-A subcomponent	Q8CG14
Complement C2	P21180
Complement C5	P06684
Copper transport protein ATOX1	O08997
Coronin-1C	Q9WUM4
Cysteine-rich protein 2	Q9DCT8
Cytosol aminopeptidase	Q9CPY7

Protein	UniProt Acc.
Desmoglein-2	O55111
Eukaryotic initiation factor 4A-I	P60843
Eukaryotic translation initiation factor 3 subunit I	Q9QZD9
Eukaryotic translation initiation factor 4B	Q88GD9
Exostosin-1	P97464
Ferritin heavy chain	P09528
Fibrinogen-like protein 1	Q71KU9
Flavin reductase (NADPH)	Q923D2
Follistatin-related protein 1	Q62356
Glutamate receptor ionotropic, NMDA 2A	P35436
Glutamine synthetase	P15105
Glycerol-3-phosphate dehydrogenase [NAD(+)], cytoplasmic	P13707
Glycogen phosphorylase, liver form	Q9ET01
Glycosylation-dependent cell adhesion molecule 1	Q02596
Golgi-associated PDZ and coiled-coil motif-containing protein	Q88H60
Growth/differentiation factor 8	O08689
GTP-binding nuclear protein Ran	P62827
Heme-binding protein 1	Q9R257
Ig $\gamma$ -3 chain C region	P03987
Ig $\kappa$ chain V-II region 17S29.1	P03976
Ig $\kappa$ chain V-II region 26-10	P01631
Ig $\kappa$ chain V-IV region S107B	P01680
Ig $\kappa$ chain V-V region K2	P01635
Ig $\kappa$ chain V-VI region NQ2-6.1	P04945
Insulin-like growth factor II	P09535
Insulin-like growth factor-binding protein 6	P47880
Insulin-like growth factor-binding protein complex acid labile subunit	P70389
$\kappa$ -casein	P06796
Keratin, type II cytoskeletal 2 oral	Q3UV17
Keratin, type II cytoskeletal 8	P11679
Lactotransferrin	P08071
Laminin subunit $\alpha$ -2	Q60675
Leptin receptor	P48356
Liprin- $\alpha$ -2	Q8B5S9
L-lactate dehydrogenase B chain	P16125
Lysosomal protective protein	P16675
Lysosome-associated membrane glycoprotein 1	P11438
Macrophage migration inhibitory factor	P34884
Mannan-binding lectin serine protease 1	P98064
Mannose-binding protein A	P39039

Protein	UniProt Acc.
Mannose-binding protein C	P41317
Matrix metalloproteinase-17	Q9R0S3
MLV-related proviral Env polyprotein	P10404
Myeloperoxidase	P11247
Myosin light polypeptide 6	Q60605
Nidogen-1	P10493
Nitrilase homolog 1	Q8VDK1
Noelin	O88998
Pappalysin-1	Q8R4K8
Peptidyl-prolyl cis-trans isomerase NIMA-interacting 1	Q9QUR7
Phosphatidylcholine-sterol acyltransferase	P16301
Phosphatidylethanolamine-binding protein 1	P70296
Phosphatidylinositol-glycan-specific phospholipase D	O70362
Plastin-2	Q61233
Podocan	Q7TQ62
Pregnancy zone protein	Q61838
Prenylcysteine oxidase	Q9CQF9
Procollagen C-endopeptidase enhancer 1	Q61398
Proline-rich acidic protein 1	Q80XD8
Proteasome subunit $\alpha$ type-2	P49722
Proteasome subunit $\beta$ type-10	O35955
Protein CTLA-2- $\alpha$	P12399
Protein disulfide-isomerase	P09103
Protein phosphatase 1 regulatory subunit 7	Q3UM45
Prothrombin	P19221
Retinoic acid receptor responder protein 2	Q9DD06
Retinol-binding protein 4	Q00724
Selenoprotein P	P70274
Serum amyloid A-2 protein	P05367
Serum amyloid P-component	P12246
Serum paraoxonase/lactonase 3	Q62087
SPARC-like protein 1	P70663
Splicing factor 3B subunit 5	Q923D4
Superoxide dismutase [Cu-Zn]	P08228
Thrombospondin-4	Q9Z1T2
Transforming growth factor $\beta$ -1	P04202
Tropomyosin $\alpha$ -3 chain	P21107
Tyrosine-protein kinase receptor Tie-1	Q06806
UMP-CMP kinase	Q9DBP5
Vasopressin-neurophysin 2-copeptin	P35455
Vinculin	Q64727
Vitamin K-dependent protein S	Q08761

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## Human Plasma BAK-270

Protein	UniProt Acc.
60 kDa heat shock protein mitochondrial	P10809
72 kDa type IV collagenase	P08253
78 kDa glucose-regulated protein	P11021
A disintegrin and metalloproteinase with thrombospondin motifs 2	O95450
A disintegrin and metalloproteinase with thrombospondin motifs 20	P59510
A disintegrin and metalloproteinase with thrombospondin motifs 9	Q9P2N4
Actin, aortic smooth muscle, Actin, $\alpha$ cardiac muscle 1, 8 other actin and actin-like proteins	P62736, P68032, 8 others
Actin-depolymerizing factor	B7Z2X4
Adhesion G protein-coupled receptor F5	Q8IZF2
Adipocyte plasma membrane-associated protein	Q9HDC9
Adiponectin	Q15848
ADM	P35318
Afamin	P43652
$\alpha$ -1-acid glycoprotein 1	P02763
$\alpha$ -1-antichymotrypsin	P01011
$\alpha$ -1-antitrypsin	P01009
$\alpha$ -1B-glycoprotein	P04217
$\alpha$ -2-antiplasmin	P08697
$\alpha$ -2-HS-glycoprotein	P02765
$\alpha$ -2-macroglobulin	P01023
Angiogenin	P03950
Angiopietin-related protein 3	Q9Y5C1
Angiotensinogen	P01019
Antithrombin-III	P01008
Apolipoprotein A-I	P02647
Apolipoprotein A-II	P02652
Apolipoprotein A-IV	P06727
Apolipoprotein B-100	P04114
Apolipoprotein C-I	P02654
Apolipoprotein C-II	P02655
Apolipoprotein C-III	P02656
Apolipoprotein C-IV	P55056
Apolipoprotein D	P05090
Apolipoprotein E	P02649
Apolipoprotein F	Q13790
Apolipoprotein L1	O14791
Apolipoprotein M	O95445
Apolipoprotein(a)	P08519
Aromatase	P11511
Atrial natriuretic peptide receptor 1	P16066
Attractin	O75882
Autism susceptibility gene 2 protein	Q8WXX7
B-cell scaffold protein with ankyrin repeats	Q8NDB2
$\beta$ -2-glycoprotein 1 (Apolipoprotein H)	P02749
$\beta$ -2-microglobulin	P61769
$\beta$ -Ala-His dipeptidase	Q96KN2
$\beta$ -nerve growth factor	P01138
Biotinidase	P43251
C-reactive protein	P02741
C4b-binding protein $\alpha$ chain	P04003
Cadherin-13	P55290
Cadherin-5	P33151
Calcitonin	P01258
Calcitonin gene-related peptide 1	P06881
Calponin-1	P51911
Carbonic anhydrase 1	P00915
Carboxypeptidase B2	Q96IY4
Carboxypeptidase N catalytic chain	P15169

Protein	UniProt Acc.
Carboxypeptidase N subunit 2	P22792
Cartilage acidic protein 1	Q9NQ79
Cathelicidin antimicrobial peptide	P49913
Cation-independent mannose-6-phosphate receptor	P11717
CD40 ligand	P29965
CD44 antigen	P16070
CD5 antigen-like	O43866
Ceruloplasmin	P00450
Cholesteryl ester transfer protein	P11597
Cholinesterase	P06276
Chromogranin-A	P10645
Claudin-5	O00501
Clusterin (Apolipoprotein J)	P10909
Coagulation factor V	P12259
Coagulation factor VII	P08709
Coagulation factor VIII	P00451
Coagulation factor IX	P00740
Coagulation factor X	P00742
Coagulation factor XI	P03951
Coagulation factor XII	P00748
Coagulation factor XIII A chain	P00488
Coagulation factor XIII B chain	P05160
Collagen $\alpha$ -1(I) chain	P02452
Collagen $\alpha$ -1(III) chain	P02461
Collagen $\alpha$ -1(XVIII) chain	P39060
Collagen $\alpha$ -2(I) chain	P08123
Complement C1q subcomponent subunit A	P02745
Complement C1q subcomponent subunit B	P02746
Complement C1q subcomponent subunit C	P02747
Complement C1r subcomponent	P00736
Complement C1r subcomponent-like protein	Q9NZP8
Complement C1s subcomponent	P09871
Complement C2	P06681
Complement C3	P01024
Complement C5	P01031
Complement component C6	P13671
Complement component C7	P10643
Complement component C8 $\alpha$ chain	P07357
Complement component C8 $\beta$ chain	P07358
Complement component C9	P02748
Complement factor B	P00751
Complement factor D	P00746
Complement factor H	P08603
Complement factor I	P05156
Complement C4	P0C0L4, P0C0L5
Corticosteroid-binding globulin	P08185
Creatine kinase B-type	P12277
Creatine kinase M-type	P06732
Cystatin-C	P01034
Desmoplakin	P15924
Di-N-acetylchitobiase	Q01459
Dickkopf-related protein 1 and 2	O94907, Q9UBU2
E-selectin	P16581
Elastin	P15502
Endothelial lipase	Q9Y5X9
Endothelial protein C receptor	Q9UNN8
Epidermal growth factor receptor	P00533

Protein	UniProt Acc.
Extracellular matrix protein 1	Q16610
Fatty acid-binding protein heart	P05413
Ferritin heavy chain	P02794
Ferritin light chain	P02792
Fetuin-B	Q9UGM5
Fibrinogen $\alpha$ chain	P02671
Fibrinogen $\beta$ chain	P02675
Fibrinogen $\gamma$ chain	P02679
Fibronectin	P02751
Fibulin-1	P23142
Ficolin-2	Q15485
Ficolin-3	O75636
Follistatin-related protein 1	Q12841
Fructose-bisphosphate aldolase B	P05062
Galectin-3	P17931
Galectin-3-binding protein	Q08380
Gamma-enolase	P09104
Gelsolin	P06396
Glial fibrillary acidic protein	P14136
Glutamate receptor ionotropic NMDA 2A	Q12879
Glutamate receptor ionotropic NMDA 2B	Q13224
Glutathione peroxidase 3	P22352
Glutathione S-transferase P	P09211
Haptoglobin	P00738
Heat shock protein $\beta$ -1	P04792
Hemoglobin subunit $\alpha$	P69905
Hemopexin	P02790
Heparin cofactor 2	P05546
Hepatocyte growth factor-like protein	P26927
Histidine-rich glycoprotein	P04196
Hornerin	Q86Y23
Hyaluronan-binding protein 2	Q14520
Ig $\gamma$ -1 chain C region	P01857
Ig $\mu$ chain C region	P01871
Ig $\mu$ heavy chain disease protein and Ig $\mu$ chain C	P04220, P01871
IgGFC-binding protein	Q9Y6R7
Immunoglobulin kappa variable 4-1	P06312
Insulin-like growth factor I	P05019
Insulin-like growth factor-binding protein 1	P08833
Insulin-like growth factor-binding protein 2	P18065
Insulin-like growth factor-binding protein 3	P17936
Insulin-like growth factor-binding protein complex acid labile subunit	P35858
Inter- $\alpha$ -trypsin inhibitor heavy chain H1	P19827
Inter- $\alpha$ -trypsin inhibitor heavy chain H2	P19823
Inter- $\alpha$ -trypsin inhibitor heavy chain H4	Q14624
Intercellular adhesion molecule 1	P05362
Interleukin-10	P22301
Interleukin-6	P05231
Interstitial collagenase	P03956
Kallistatin	P29622
Keratin type I cytoskeletal 10	P13645
Keratin type I cytoskeletal 9	P35527
Keratin type II cytoskeletal 2 epidermal	P35908
Kininogen-1	P01042
L-selectin	P14151
Lactotransferrin	P02788
Leucine-rich $\alpha$ -2-glycoprotein	P02750
Lipopolysaccharide-binding protein	P18428
Lumican	P51884

## Human Plasma BAK-270 (continued)

Protein	UniProt Acc.
Lysozyme C	P61626
Mannan-binding lectin serine protease 1	P48740
Mannan-binding lectin serine protease 2A	O00187
Mannose-binding protein C	P11226
Matrix Gla protein	P08493
Matrix metalloproteinase-9	P14780
Melanotransferrin	P08582
Metalloproteinase inhibitor 1	P01033
Metalloproteinase inhibitor 2	P16035
Metalloproteinase inhibitor 4	Q99727
Microtubule-associated protein $\tau$	P10636
Mucin-16	Q8WXI7
Myelin basic protein	P02686
Myeloblastin	P24158
Myeloperoxidase	P05164
N-acetylmuramoyl-L-alanine amidase	Q96PD5
N(G),N(G)-dimethylarginine dimethylaminohydrolase 1	O94760
Natriuretic peptides B	P16860
Neuropilin-2	O60462
Neutrophil gelatinase-associated lipocalin	P80188
Nucleoside diphosphate kinase A	P15531
Occludin	Q16625
Osteopontin	P10451
Oxidized low-density lipoprotein receptor 1	P78380
P-selectin	P16109
Pappalysin-1	Q13219
Parkinson's disease protein 7 (Protein DJ-1)	Q99497
Peroxiredoxin-1	Q06830
Peroxiredoxin-2	P32119
Phosphatidylcholine-sterol acyltransferase	P04180
Phosphatidylinositol-glycan-specific phospholipase D	P80108
Phospholipid transfer protein	P55058

Protein	UniProt Acc.
Pigment epithelium-derived factor	P36955
Plasma protease C1 inhibitor	P05155
Plasma serine protease inhibitor	P05154
Plasminogen	P00747
Plasminogen activator inhibitor 1	P05121
Plastin-2	P13796
Platelet endothelial cell adhesion molecule	P16284
Platelet glycoprotein VI	Q9HCN6
Platelet-activating factor acetylhydrolase	Q13093
Pregnancy zone protein	P20742
Proenkephalin-A	P01210
Prolactin	P01236
Protein AMBP	P02760
Protein S100-A12	P80511
Protein S100-A9	P06702
Protein S100-B	P04271
Protein Z-dependent protease inhibitor	Q9UK55
Proteoglycan 4	Q92954
Prothrombin	P00734
Ras GTPase-activating protein nGAP	Q9UJF2
Resistin	Q9HD89
Retinol-binding protein 4	P02753
Serotransferrin	P02787
Serum albumin	P02768
Serum amyloid A-1 and A-2 proteins	P0DJ18, P0DJ19
Serum amyloid A-4 protein	P35542
Serum amyloid P-component	P02743
Serum paraoxonase/arylesterase 1	P27169
Serum paraoxonase/lactonase 3	Q15166
Sex hormone-binding globulin	P04278
SPARC	P09486
Spermine oxidase	Q9NWM0
Sterile $\alpha$ motif domain-containing protein 9-like	Q8IVG5
Stromelysin-1	P08254

Protein	UniProt Acc.
Target of Nesh-SH3	Q727G0
TBC1 domain family member 10A	Q9BXI6
Tenascin	P24821
Tenascin-X	P22105, Q16473
Tetranectin	P05452
Thrombosmodulin	P07204
Thrombospondin-1	P07996
Thrombospondin-4	P35443
Thyroglobulin	P01266
Thyroxine-binding globulin	P05543
Tissue factor pathway inhibitor	P10646
Tissue-type plasminogen activator	P00750
Transcription factor SOX-11	P35716
Transferrin receptor protein 1	P02786
Transthyretin	P02766
Tumor necrosis factor receptor superfamily member 1A	P19438
Tumor necrosis factor receptor superfamily member 1B	P20333
Vascular cell adhesion protein 1	P19320
Vascular endothelial growth factor B	P49765
Vascular endothelial growth factor D	O43915
Vascular noninflammatory molecule 3	Q9NY84
Vasorin	Q6EMK4
Vitamin D-binding protein	P02774
Vitamin K-dependent protein C	P04070
Vitamin K-dependent protein S	P07225
Vitamin K-dependent protein Z	P22891
Vitronectin	P04004
von Willebrand factor	P04275
Xaa-Pro dipeptidase	P12955
Zinc- $\alpha$ -2-glycoprotein	P25311

## Human Tissue Cancer BAK-50

Protein	UniProt Acc.
RAC- $\alpha$ serine/threonine-protein kinase B	P31749
RAC- $\beta$ serine/threonine-protein kinase B $\beta$	P31751
Albumin	P02768
Rho GTPase-activating protein 1	Q07960
Actin-related protein 2/3 complex subunit 4	P59998
Cyclic AMP-dependent transcription factor ATF-4	P18848
Carbonyl reductase [NADPH] 1	P16152
T-complex protein 1 subunit $\gamma$	P49368
Copine-1	Q99829
Eukaryotic translation initiation factor 2- $\alpha$ kinase 3 (PERK)	Q9NZJ5
Eukaryotic translation initiation factor 2 subunit 1 (eIF2 $\alpha$ )	P05198
Eukaryotic translation initiation factor 3 subunit E	P60228
Eukaryotic initiation factor 4A-I	P60842
Eukaryotic translation initiation factor 4E	P06730
Eukaryotic translation initiation factor 5	P55010
Eukaryotic translation initiation factor 6	P56537
Electron transfer flavoprotein subunit $\beta$	P38117

Protein	UniProt Acc.
Trifunctional enzyme subunit $\beta$ , mitochondrial	P55084
Hexokinase-1	P19367
Heterogeneous nuclear ribonucleo-protein L	P14866
Heat shock protein HSP 90- $\beta$	P08238
Endoplasmic reticulum chaperone BiP	P11021
Heat shock protein $\beta$ -1	P04792
Immunoglobulin heavy constant $\gamma$ 2	P01859
Immunoglobulin $\kappa$ variable 4-1	P06312
Interleukin enhancer-binding factor 2	Q12905
Interleukin enhancer-binding factor 3	Q12906
GTPase KRas	P01116
Galectin-3	P17931
Mitogen-activated protein kinase 4	Q95819
Mitogen-activated protein kinase 1	P28482
Mitogen-activated protein kinase 3	P27361
Malate dehydrogenase, mitochondrial	P40926
Serine/threonine-protein kinase mTOR	P42345
Poly(rC)-binding protein 1	Q15365
Protein disulfide-isomerase A6	Q15084

Protein	UniProt Acc.
Prohibitin 1	P35232
Prohibitin-2	Q99623
Polymeric immunoglobulin receptor	P01833
Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit $\beta$ isoform	P42338
60S ribosomal protein L27a	P46776
60S ribosomal protein L3	P39023
40S ribosomal protein S2	P15880
40S ribosomal protein S3a	P61247
40S ribosomal protein S9	P46781
Ribosomal protein S6 kinase $\beta$ -1	P23443
Septin-2	Q15019
GDP-L-fucose synthase	Q13630
Elongation factor Tu, mitochondrial	P49411
X-ray repair cross-complementing protein 5	P13010

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