

## Performing biomarker discovery or biomarker verification? PeptiQuant™ Biomarker Assessment Kit (BAK-76)

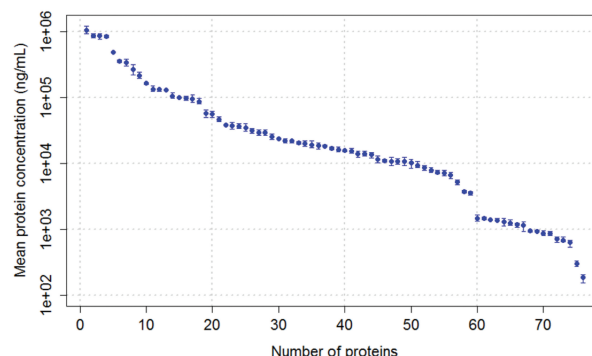
The PeptiQuant™ Biomarker Assessment Kit (BAK-76) has been developed for rapid and precise quantitation of 76 plasma proteins (see list below), valuable in both biomarker discovery and validation studies. The BAK-76 provides an easy solution for nonexpert users to rigorously assess the utility and significance of 76 high- to moderate-abundance proteins in various disease states in only 20 µL of human plasma.

Each kit contains the following items:

- Lyophilized SIS peptide mixture for spiking into reference plasma sample digest for standard curve generation
- Lyophilized SIS peptide mixture for spiking into experimental sample digests
- USB drive that contains the manual appropriate for the LC/MS instrument, the certificate of analysis for the SIS peptide mixture, the required acquisition methods, the data analysis method for MassHunter, and the input files for Qualis-SIS and guideline values (e.g., endogenous protein concentration, dynamic range, etc.) for the reference plasma sample

Kits are available for 20 or 50 samples.

Catalog No.	Description
BAK-A6490-76	PeptiQuant™ Biomarker Assessment Kit for 76 proteins using the Agilent 6490/UPLC 1290
BAK-A6495-76	PeptiQuant™ Biomarker Assessment Kit for 76 proteins using the Agilent 6495/UPLC 1290



The mean protein concentration for each of the 76 proteins is shown above.

## 76 Quantifiable Proteins

Afamin	Coagulation factor V	Haptoglobin
Alpha-1-antichymotrypsin	Coagulation factor X	Hemoglobin subunit alpha
Alpha-1B-glycoprotein	Coagulation factor XI	Hemopexin
Alpha-2-antiplasmin	Coagulation factor XII	Heparin cofactor 2
Alpha-2-HS-glycoprotein	Complement C1q subcomponent subunit A	Insulin-like growth factor binding protein acid labile subunit
Alpha-2-macroglobulin	Complement C1q subcomponent subunit B	Insulin-like growth factor-binding protein 3
Antithrombin-III	Complement C1q subcomponent subunit C	Inter-alpha-trypsin inhibitor heavy chain H1
Apolipoprotein(a)	Complement C1r subcomponent	Inter-alpha-trypsin inhibitor heavy chain H2
Apolipoprotein A-I	Complement C1s subcomponent	Lipopolysaccharide-binding protein
Apolipoprotein A-IV	Complement C2	Lumican
Apolipoprotein B-100	Complement C3	Neuropilin-2
Apolipoprotein C-II	Complement C4-B	Pigment epithelium-derived factor
Apolipoprotein D	Complement C5	Plasma retinol-binding protein
Apolipoprotein E	Complement component C8 alpha chain	Protein AMBP
Apolipoprotein M	Complement component C8 beta chain	Prothrombin
Beta-2-glycoprotein 1	Complement component C9	Serotransferrin
Beta-2-microglobulin	Complement factor B	Serum amyloid A-4 protein
Beta-Ala-His dipeptidase	Complement factor D	Sex hormone-binding globulin
C4b-binding protein alpha chain	Complement factor I	Thyroxine-binding globulin
Carbonic anhydrase 1	Corticosteroid-binding globulin	Transthyretin
Cartilage acidic protein 1	C-reactive protein	Vasorin
CD5 antigen-like	Cystatin-C	Vitamin D-binding protein
cDNA FLJ53327	Fibrinogen alpha chain	Vitamin K-dependent protein C
Ceruloplasmin	Fibronectin	Vitamin K-dependent protein S
Cholinesterase	Fibulin-1	
Clusterin	Gelsolin	

Please contact us if you do not see your protein(s) of interest listed above. We have the capability to supply custom kits to suit a variety of needs. If you are interested in using these kits but your LC/MS instrument is not listed, again, please contact us. We are developing kits for other platforms – if a kit for your LC/MS instrument is not yet available, we may be able to supply it as a custom kit.

For more information regarding these products and MRM Proteomics please visit [mrmproteomics.com](http://mrmproteomics.com).

Custom kits  
are available.  
Please  
inquire.

## BAK-76 Kit Specification Sheet for SIS Peptide Mixture

Protein	UniProtKB Accession No.	Protein MW [Da]	Peptide	LLOQ [ng/mL]	ULOQ [ng/mL]
Afamin	P43652	66577.02	DADPDTFFAK	1572	31448
Alpha-1-antichymotrypsin	P01011	45265.82	NLAVSQVVHK	927	463293
Alpha-1B-glycoprotein	P04217	51921.66	GVTFLLR	2085	208530
Alpha-1B-glycoprotein	P04217	51921.66	LETPDFQLFK	29335	586701
Alpha-2-antiplasmin	P08697	50450.85	LGNQEPGGQTALK	300	150112
Alpha-2-HS-glycoprotein	P02765	37327.17	FSVVYAK	1623	811358
Alpha-2-macroglobulin	P01023	160809.88	AIGYLNTGYQR	61976	6197571
Antithrombin-III	P01008	49039.14	DDLVSDAFHK	2862	57248
Apolipoprotein(a)	P08519	499185.47	GYSTTVTGR	32198	643957
Apolipoprotein A-I	P02647	28078.62	ATEHLSTLSEK	618269	6182687
Apolipoprotein A-IV	P06727	43402.53	LLPHANEVSQK	368	184223
Apolipoprotein B-100	P04114	512858.25	TGISPLALIK	17720	1772017
Apolipoprotein C-II	P02655	8914.92	TAAONLYEK	60	6001
Apolipoprotein D	P05090	19303.08	VLNQELR	433	216734
Apolipoprotein E	P02649	34236.68	AATVGLSLAGQPLQER	1303	130345
Apolipoprotein E	P02649	34236.68	LGPLVEQGR	353	176292
Apolipoprotein M	O95445	21253.29	AFLTPR	2259	225864
Beta-2-glycoprotein 1	P02749	36254.6	ATVVYQGER	584	291850
Beta-2-microglobulin	P61769	11731.17	IQVYSR	29	2905
Beta-2-microglobulin	P61769	11731.17	VNHVTLSPK	416	8329
Beta-Ala-His dipeptidase	Q96KN2	53877.56	SVVLIPLGAVDDGEHSQNEK	406	8124
C4b-binding protein alpha chain	P04003	61670.65	EDVYVGTVLR	4201	42007
C4b-binding protein alpha chain	P04003	61670.65	LNNGEITQHR	878	87818
Carbonic anhydrase 1	P00915	28739.02	VLDALQAIK	67	6676
Cartilage acidic protein 1	Q9NQ79	68434.07	GVASLFAGR	316	6328
CD5 antigen-like	O43866	36055.22	LVGGLHR	406	202904
cDNA FLJ53327	B7Z2X4	77789.44	EGGQTAPASTR	4013	401297
Ceruloplasmin	P00450	120085.49	IYHSHIDAPK	20723	10361552
Cholinesterase	P06276	65083.85	YLTLNTESTR	809	16186
Clusterin	P10909	50062.56	ELDESLQVAER	33691	673815
Clusterin	P10909	50062.56	TLLSNLEEAK	1051	105131
Coagulation factor V	P12259	248686.9	AEVDDVIQVR	4172	83435
Coagulation factor X	P00742	50336.41	TGIVSGFGR	473	47289
Coagulation factor XI	P03951	68025.61	TSEGLPSTR	2027	40541
Coagulation factor XII	P00748	65733.54	TEQAAVAR	1610	161047
Coagulation factor XII	P00748	65733.54	VVGGLVALR	859	85878
Complement C1q subcomponent subunit A	P02745	23687.69	PAFSAIR	33	3291
Complement C1q subcomponent subunit B	P02746	23741.92	IAFSATR	687	68701
Complement C1q subcomponent subunit C	P02747	22812.95	FQSVFTVTR	4023	80462
Complement C1r subcomponent	P00736	78213.16	GLTLHLK	302	151218
Complement C1r subcomponent	P00736	78213.16	YTTEIHK	599	59891
Complement C1s subcomponent	P09871	74887.19	TNFDNDIALVR	5892	117842
Complement C2	P06681	81085.11	HAFILQDTK	1979	39586
Complement C2	P06681	81085.11	TAVDHIR	5216	52158
Complement C3	P01024	184951.34	SGIPIVTPYQIHFTK	238216	4764314
Complement C3	P01024	184951.34	TGLQEVEVK	1884	941886
Complement C4-B	POCOL5	190499.74	GSFEFPVGDAVSK	12117	1211675
Complement C4-B	POCOL5	190499.74	VGDTLNLNLR	89556	1791122

(continued)

**Cambridge Isotope Laboratories, Inc. is the exclusive distributor of MRM Proteomics, Inc.**

To place an order please contact CIL: | t: 978.749.8000 | 1.800.322.1174 (North America) | cilsales@isotope.com

For international inquiries, please contact our International Customer Service Department at intl@isotope.com.

Protein	UniProtKB Accession No.	Protein MW [Da]	Peptide	LLOQ [ng/mL]	ULOQ [ng/mL]
Complement C5	P01031	186340.79	VFQFLEK	1985	198469
Complement component C8 beta chain	P07358	61042.89	SDLEVAHYK	501	50064
Complement component C8 alpha chain	P07357	61711.04	HTSLGPLEAK	1123	112314
Complement component C9	P02748	60978.68	LSPYINLVPVK	1470	146950
Complement component C9	P02748	60978.68	VVESELAR	1304	130389
Complement factor B	P00751	83000.8	EELPAQDIK	805	80452
Complement factor D	P00746	24404.78	THHDGAITER	306	30632
Complement factor I	P05156	63487.35	HGNTDSEGIVEVK	945	94528
Corticosteroid-binding globulin	P08185	42638.8	ITQDAQLK	406	203199
C-reactive protein	P02741	23047.14	AFVFPK	43	4271
Cystatin-C	P01034	13347.14	ALDFAVGEYNK	247	4938
Fibrinogen alpha chain	P02671	91358.87	ESSSHHPGIAEFPSR	26190	2618999
Fibrinogen alpha chain	P02671	91358.87	GSESGIFTNTK	8567	4283493
Fibronectin	P02751	259562.86	HTSVQTTSSGSGPFTDVR	6579	657883
Fibronectin	P02751	259562.86	SSPVIDASTAIDAPSNLR	75422	754220
Fibulin-1	P23142	74290.5	GYHLNEEGTR	4049	80973
Fibulin-1	P23142	74290.5	TGYFDGISR	704	70418
Gelsolin	P06396	82959.11	AGALNSNDAFVLK	2034	203412
Gelsolin	P06396	82959.11	TASDFITK	494	247203
Haptoglobin	P00738	43349.01	DYAEVGR	328	163859
Haptoglobin	P00738	43349.01	HYEGSTVPEK	1669	834346
Hemoglobin subunit alpha	P69905	15126.36	TYFPFDLSHGSAQVK	3685	73702
Hemoglobin subunit alpha	P69905	15126.36	VGAHAGEYGAEALER	867	86730
Hemopexin	P02790	49295.43	NFPSPVDAAFR	11896	1189572
Heparin cofactor 2	P05546	54960.02	SVNDLYIQK	147	73501
Heparin cofactor 2	P05546	54960.02	TLEAQLTPR	854	426939
Insulin-like growth factor binding protein acid labile subunit	P35858	63246.57	LAELPADALGPLQR	2394	47887
Insulin-like growth factor-binding protein 3	P17936	28749.62	FLNVLSPR	98	9793
Inter-alpha-trypsin inhibitor heavy chain H1	P19827	71415.01	GSLVQASEANLQAAQDFVR	16978	169778
Inter-alpha-trypsin inhibitor heavy chain H2	P19823	100114.13	FYNQVSTPLLR	9723	972316
Inter-alpha-trypsin inhibitor heavy chain H2	P19823	100114.13	SLAPATAAK	1101	550488
Lipopolysaccharide-binding protein	P18428	50908.6	ITLPDFTGDLR	469	4691
Lumican	P51884	36660.91	FNALQYLR	148	14833
Neuropilin-2	O60462	102374.7	ALQVVR	561	56116
Pigment epithelium-derived factor	P36955	44387.8	TVQAVLTVPK	3107	1553573
Plasma retinol-binding protein	P02753	21071.6	YWGVASFLQK	1476	29528
Protein AMBP	P02760	20846.74	ETLLQDFR	1546	154556
Protein AMBP	P02760	20846.74	HHGPTITAK	6272	125433
Prothrombin	P00734	65308.2	ELLESYIDGR	18014	360289
Prothrombin	P00734	65308.2	TATSEYQTFNPR	26902	538034
Serotransferrin	P02787	75195.46	DGAGDVAFVK	4833	2416732
Serotransferrin	P02787	75195.46	EGYYGYTGAFR	132312	2646234
Serum amyloid A-4 protein	P35542	12803.24	GNYDAAQR	135	67556
Sex hormone-binding globulin	P04278	40468.17	IALGGLFPASNLR	1006	10055
Sex hormone-binding globulin	P04278	40468.17	TSSSFEVR	789	78922
Thyroxine-binding globulin	P05543	44101.73	AVLHIGEK	110	54954
Transthyretin	P02766	13761.41	ALGISPFHEHAEVFTANDSGPR	7272	145449
Vasorin	Q6EMK4	69356.64	ESHVTLASPEETR	583	58342
Vasorin	Q6EMK4	69356.64	YLQGSVQLR	398	39787
Vitamin D-binding protein	P02774	51243.46	ELPEHTVK	3819	1909618
Vitamin D-binding protein	P02774	51243.46	THLPEVFLSK	7114	711427
Vitamin K-dependent protein C	P04070	47332.75	LGEYDLR	1042	20834
Vitamin K-dependent protein S	P07225	70645.14	VYFAGFPR	1266	126552

Specifications subject to change without notice.



Cambridge Isotope Laboratories, Inc., 3 Highwood Drive, Tewksbury, MA 01876 USA

tel: +1.978.749.8000

fax: +1.978.749.2768

1.800.322.1174 (North America)

www.isotope.com

MRM\_BAK-76  
3/15 Supersedes all previously published literature