

**TABLE 6: TBI patients and control subjects CSF proteomes**

	Trauma-released after astrocyte stretch-injury <sup>1</sup> .
	Two-fold or more astrocyte-enriched proteins <sup>2</sup> .
	Trauma-released and two-fold or more astrocyte-enriched proteins.
<i>Italics</i>	Proteins are present in healthy plasma <sup>3,4</sup> .

	Accession	Protein Name
TBI only CSF proteins	O94760	N(G),N(G)-dimethylarginine dimethylaminohydrolase 1
	<i>P11142</i>	<i>Heat shock cognate 71 kDa protein</i>
	<i>P18206</i>	<i>Vinculin</i>
	P15104	Glutamine synthetase (GS) (EC 6.3.1.2)
	<i>P12277</i>	<i>Creatine kinase B-type</i>
	<i>Q06830</i>	<i>Peroxiredoxin-1</i>
	<i>P31946</i>	<i>14-3-3 protein beta/alpha</i>
	<i>P62258</i>	<i>14-3-3 protein epsilon</i>
	<i>P61981</i>	<i>14-3-3 protein gamma</i>
	<i>P63104</i>	<i>14-3-3 protein zeta/delta</i>
	<i>P23528</i>	<i>Cofilin-1</i>
	<i>O75874</i>	<i>Isocitrate dehydrogenase cytoplasmic</i>
	<i>P00558</i>	<i>Phosphoglycerate kinase 1</i>
	<i>P13796</i>	<i>Plastin-2</i>
	<i>P67936</i>	<i>Tropomyosin alpha-4 chain</i>
	<i>Q13885</i>	<i>Tubulin beta-2A chain</i>
	<i>P27348</i>	<i>14-3-3 protein theta</i>
	<i>Q16555</i>	<i>Dihydropyrimidinase-related protein 2</i>
	<i>P21333</i>	<i>Filamin-A</i>
	<i>Q12765</i>	<i>Secernin-1</i>
	<i>P06753</i>	<i>Tropomyosin alpha-3 chain</i>
	<i>P14136</i>	<i>Glial fibrillary acidic protein</i>
	<i>P30041</i>	<i>Peroxiredoxin-6</i>
	<i>P08670</i>	<i>Vimentin</i>
	<i>P80108</i>	<i>Phosphatidylinositol-glycan-specific phospholipase D</i>
	<i>P00491</i>	<i>Purine nucleoside phosphorylase</i>
	<i>P25713</i>	<i>Metallothionein-3</i>
	<i>P00918</i>	<i>Carbonic anhydrase 2</i>
	<i>Q01469</i>	<i>Fatty acid-binding protein, epidermal</i>
	<i>P30043</i>	<i>Flavin reductase</i>
	<i>Q06033</i>	<i>Inter-alpha-trypsin inhibitor heavy chain H3</i>
	<i>P02545</i>	<i>Prelamin-A/C</i>
	<i>P26447</i>	<i>Protein S100-A4</i>
<i>P09382</i>	<i>Galectin-1</i>	
<i>P09429</i>	<i>High mobility group protein B1</i>	
<i>P26583</i>	<i>High mobility group protein B2</i>	
<i>P18669</i>	<i>Phosphoglycerate mutase 1</i>	
<i>Q71U36</i>	<i>Tubulin alpha-1A chain</i>	
<i>P04040</i>	<i>Catalase</i>	
<i>P21291</i>	<i>Cysteine and glycine-rich protein 1</i>	
<i>P26038</i>	<i>Moesin</i>	
<i>P06703</i>	<i>Protein S100-A6</i>	
<i>P28799</i>	<i>Granulins</i>	
<i>P54652</i>	<i>Heat shock-related 70 kDa protein 2</i>	
<i>P35998</i>	<i>26S protease regulatory subunit 7</i>	

## TBI only CSF proteins

P68032	<i>Actin, alpha cardiac muscle 1</i>
P63261	<i>Actin, cytoplasmic 2</i>
P00568	<i>Adenylate kinase isoenzyme 1</i>
Q01518	<i>Adenylyl cyclase-associated protein 1</i>
P12814	<i>Alpha-actinin-1</i>
P04083	<i>Annexin A1</i>
P04114	<i>Apolipoprotein B-100</i>
P02655	<i>Apolipoprotein C-II</i>
Q13790	<i>Apolipoprotein F</i>
O14791	<i>Apolipoprotein L1</i>
O95445	<i>Apolipoprotein M</i>
P08519	<i>Apolipoprotein(a)</i>
P07738	<i>Bisphosphoglycerate mutase</i>
P04003	<i>C4b-binding protein alpha chain</i>
P20851	<i>C4b-binding protein beta chain</i>
P05937	<i>Calbindin</i>
P00915	<i>Carbonic anhydrase 1</i>
P16152	<i>Carbonyl reductase</i>
P15169	<i>Carboxypeptidase N catalytic chain</i>
P22792	<i>Carboxypeptidase N subunit 2</i>
P49913	<i>Cathelicidin antimicrobial peptide</i>
O43866	<i>CD5 antigen-like</i>
P06276	<i>Cholinesterase</i>
P00740	<i>Coagulation factor IX</i>
P05160	<i>Coagulation factor XIII B chain</i>
P02745	<i>Complement C1q subcomponent subunit A</i>
P31146	<i>Coronin-1A</i>
P02741	<i>C-reactive protein</i>
P06732	<i>Creatine kinase M-type</i>
P13716	<i>Delta-aminolevulinic acid dehydratase</i>
P81605	<i>Dermcidin</i>
P15090	<i>Fatty acid-binding protein, adipocyte</i>
P02792	<i>Ferritin light chain</i>
Q9UGM5	<i>Fetuin-B</i>
O75636	<i>Ficolin-3</i>
P05062	<i>Fructose-bisphosphate aldolase B</i>
P06744	<i>Glucose-6-phosphate isomerase</i>
P35754	<i>Glutaredoxin-1</i>
P78417	<i>Glutathione S-transferase omega-1</i>
P09211	<i>Glutathione S-transferase P</i>
P69891	<i>Hemoglobin subunit gamma-1</i>
P26927	<i>Hepatocyte growth factor-like protein</i>
P10412	<i>Histone H1.4</i>
P16401	<i>Histone H1.5</i>
P62805	<i>Histone H4</i>
Q86YZ3	<i>Hornerin</i>
Q14520	<i>Hyaluronan-binding protein 2</i>
P01591	<i>Immunoglobulin J chain</i>
P02533	<i>Keratin, type I cytoskeletal 14</i>
P35908	<i>Keratin, type II cytoskeletal 2 epidermal</i>
P13647	<i>Keratin, type II cytoskeletal 5</i>
P02788	<i>Lactotransferrin</i>
P30740	<i>Leukocyte elastase inhibitor</i>
P18428	<i>Lipopolysaccharide-binding protein</i>

## TBI only CSF proteins

P00338	<i>L-lactate dehydrogenase A chain</i>
P14151	<i>L-selectin</i>
Q9Y5Y7	<i>Lymphatic vessel endothelial hyaluronic acid receptor 1</i>
P14174	<i>Macrophage migration inhibitory factor</i>
P14780	<i>Matrix metalloproteinase-9</i>
P11137	<i>Microtubule-associated protein 2</i>
P19105	<i>Myosin regulatory light chain 12A</i>
P12882	<i>Myosin-1</i>
P12883	<i>Myosin-7</i>
P35579	<i>Myosin-9</i>
P59665	<i>Neutrophil defensin 1</i>
P80188	<i>Neutrophil gelatinase-associated lipocalin</i>
P30044	<i>Peroxiredoxin-5, mitochondrial</i>
P02775	<i>Platelet basic protein</i>
P02776	<i>Platelet factor 4</i>
P20742	<i>Pregnancy zone protein</i>
P07737	<i>Profilin-1</i>
P27918	<i>Properdin</i>
P25786	<i>Proteasome subunit alpha type-1</i>
P28072	<i>Proteasome subunit beta type-6</i>
P05109	<i>Protein S100-A8</i>
Q9UK55	<i>Protein Z-dependent protease inhibitor</i>
Q92954	<i>Proteoglycan 4</i>
P31150	<i>Rab GDP dissociation inhibitor alpha</i>
P52565	<i>Rho GDP-dissociation inhibitor 1</i>
P52566	<i>Rho GDP-dissociation inhibitor 2</i>
P0DJ18	<i>Serum amyloid A-1 protein</i>
P0DJ19	<i>Serum amyloid A-2 protein</i>
P02743	<i>Serum amyloid P-component</i>
P04278	<i>Sex hormone-binding globulin</i>
Q9H299	<i>SH3 domain-binding glutamic acid-rich-like protein 3</i>
P10599	<i>Thioredoxin</i>
P07996	<i>Thrombospondin-1</i>
P62328	<i>Thymosin beta-4</i>
P37837	<i>Transaldolase</i>
P29401	<i>Transketolase</i>
P68363	<i>Tubulin alpha-1B chain</i>
P68366	<i>Tubulin alpha-4A chain</i>
P07437	<i>Tubulin beta chain</i>
P68371	<i>Tubulin beta-4B chain</i>
P09936	<i>Ubiquitin carboxyl-terminal hydrolase isozyme L1</i>
P04275	<i>von Willebrand factor</i>
P61604	<i>10 kDa heat shock protein, mitochondrial</i>
P62191	<i>26S protease regulatory subunit 4</i>
P17980	<i>26S protease regulatory subunit 6A</i>
P43686	<i>26S protease regulatory subunit 6B</i>
P62195	<i>26S protease regulatory subunit 8</i>
Q13200	<i>26S proteasome non-ATPase regulatory subunit 2</i>
P51665	<i>26S proteasome non-ATPase regulatory subunit 7</i>
P52209	<i>6-phosphogluconate dehydrogenase, decarboxylating</i>
P00325	<i>Alcohol dehydrogenase 1B</i>
Q9NZD4	<i>Alpha-hemoglobin-stabilizing protein</i>
P20160	<i>Azurocidin</i>
P02730	<i>Band 3 anion transport protein</i>

## TBI only CSF proteins

Q562R1	Beta-actin-like protein 2
Q13938	Calcyphosin
P62158	Calmodulin
P08311	Cathepsin G
P29762	Cellular retinoic acid-binding protein 1
Q15782	Chitinase-3-like protein 2
O43405	Cochlin
P32320	Cytidine deaminase
P19957	Elafin
P12724	Eosinophil cationic protein
P02794	Ferritin heavy chain
Q05315	Galectin-10
P00739	Haptoglobin-related protein
P0DMV8	Heat shock 70 kDa protein 1A
P08238	Heat shock protein HSP 90-beta
P69892	Hemoglobin subunit gamma-2
Q14103	Heterogeneous nuclear ribonucleoprotein D0
P22492	Histone H1t
P20671	Histone H2A type 1-D
O60814	Histone H2B type 1-K
P68431	Histone H3.1
P01877	Ig alpha-2 chain C region
P01880	Ig delta chain C region
P01743	Ig heavy chain V-I region HG3
P23083	Ig heavy chain V-I region V35
P06331	Ig heavy chain V-II region ARH-77
P01824	Ig heavy chain V-II region WAH
P01769	Ig heavy chain V-III region GA
P01762	Ig heavy chain V-III region TRO
P01779	Ig heavy chain V-III region TUR
P01594	Ig kappa chain V-I region AU
P01604	Ig kappa chain V-I region Kue
P01605	Ig kappa chain V-I region Lay
P01608	Ig kappa chain V-I region Roy
P01610	Ig kappa chain V-I region WEA
P01611	Ig kappa chain V-I region Wes
P01616	Ig kappa chain V-II region MIL
P04206	Ig kappa chain V-III region GOL
P06311	Ig kappa chain V-III region IARC/BL41
P01624	Ig kappa chain V-III region POM
P01623	Ig kappa chain V-III region WOL
P04211	Ig lambda chain V region 4A
P01701	Ig lambda chain V-I region NEW
P01702	Ig lambda chain V-I region NIG-64
P04208	Ig lambda chain V-I region WAH
P06889	Ig lambda chain V-IV region MOL
A0M8Q6	Ig lambda-7 chain C region
P04220	Ig mu heavy chain disease protein
P09960	Leukotriene A-4 hydrolase
P08637	Low affinity immunoglobulin gamma Fc region receptor III-A
Q9BZG9	Ly-6/neurotoxin-like protein 1
P40121	Macrophage-capping protein
P08493	Matrix Gla protein
P02686	Myelin basic protein

TBI only CSF proteins	P20916	Myelin-associated glycoprotein
	P24158	Myeloblastin
	P05164	Myeloperoxidase
	P60660	Myosin light polypeptide 6
	P29966	Myristoylated alanine-rich C-kinase substrate
	P22894	Neutrophil collagenase
	P59666	Neutrophil defensin 3
	P08246	Neutrophil elastase
	P10153	Non-secretory ribonuclease
	P20472	Parvalbumin alpha
	O75594	Peptidoglycan recognition protein 1
	P15259	Phosphoglycerate mutase 2
	P0CG48	Polyubiquitin-C
	P31949	Protein S100-A11
	P80511	Protein S100-A12
	P04271	Protein S100-B
	P48539	Purkinje cell protein 4
	P48741	Putative heat shock 70 kDa protein 7
	Q9HD89	Resistin
	P63313	Thymosin beta-10
P07951	Tropomyosin beta chain	
Q13509	Tubulin beta-3 chain	
P04350	Tubulin beta-4A chain	
Q9BW30	Tubulin polymerization-promoting protein family member 3	
Q9Y279	V-set and immunoglobulin domain-containing protein 4	
TBI & Control CSF proteins	<i>P02649</i>	<i>Apolipoprotein E</i>
	<i>P10909</i>	<i>Clusterin</i>
	<i>P09972</i>	<i>Fructose-bisphosphate aldolase C</i>
	<i>P60709</i>	<i>Actin, cytoplasmic 1</i>
	<i>P07195</i>	<i>L-lactate dehydrogenase B chain</i>
	<i>P13645</i>	<i>Keratin, type I cytoskeletal 10</i>
	<i>P00441</i>	<i>Superoxide dismutase</i>
	<i>P06733</i>	<i>Alpha-enolase</i>
	<i>P06396</i>	<i>Gelsolin</i>
	<i>P19823</i>	<i>Inter-alpha-trypsin inhibitor heavy chain H2</i>
	<i>P30086</i>	<i>Phosphatidylethanolamine-binding protein 1</i>
	<i>P04075</i>	<i>Fructose-bisphosphate aldolase A</i>
	<i>P40925</i>	<i>Malate dehydrogenase, cytoplasmic</i>
	<i>P32119</i>	<i>Peroxiredoxin-2</i>
	<i>P04406</i>	<i>Glyceraldehyde-3-phosphate dehydrogenase</i>
	<i>P00751</i>	<i>Complement factor B</i>
	<i>P62937</i>	<i>Peptidyl-prolyl cis-trans isomerase A</i>
	<i>P01023</i>	<i>Alpha-2-macroglobulin</i>
	<i>P01019</i>	<i>Angiotensinogen</i>
	<i>P16070</i>	<i>CD44 antigen</i>
	<i>P0C0L5</i>	<i>Complement C4-B</i>
	<i>P01034</i>	<i>Cystatin-C</i>
	<i>Q12805</i>	<i>EGF-containing fibulin-like extracellular matrix protein 1</i>
<i>P18065</i>	<i>Insulin-like growth factor-binding protein 2</i>	
<i>P36955</i>	<i>Pigment epithelium-derived factor</i>	
<i>Q13228</i>	<i>Selenium-binding protein 1</i>	
<i>Q14515</i>	<i>SPARC-like protein 1</i>	
<i>P19320</i>	<i>Vascular cell adhesion protein 1</i>	

## TBI &amp; Control CSF proteins

P36222	Chitinase-3-like protein 1
Q9UBP4	Dickkopf-related protein 3
O14594	Neurocan core protein
O00584	Ribonuclease T2
O14498	Immunoglobulin superfamily containing leucine-rich repeat protein
P01871	Ig mu chain C region
P06681	Complement C2
P07108	Acyl-CoA-binding protein
P07225	Vitamin K-dependent protein S
P08294	Extracellular superoxide dismutase
P09486	SPARC
P12259	Coagulation factor V
P13473	Lysosome-associated membrane glycoprotein 2
P17900	Ganglioside GM2 activator
P19022	Cadherin-2
P43251	Biotinidase
P49908	Selenoprotein P
P78324	Tyrosine-protein phosphatase non-receptor type substrate 1
Q08380	Galectin-3-binding protein
Q12841	Follistatin-related protein 1
Q13449	Limbic system-associated membrane protein
Q13740	CD166 antigen
Q14118	Dystroglycan
Q8WXD2	Secretogranin-3
Q96GW7	Brevican core protein
Q9P121	Neurotrimin
P02768	Serum albumin
P02787	Serotransferrin
P01024	Complement C3
P00450	Ceruloplasmin
P01008	Antithrombin-III
P00738	Haptoglobin
P02656	Apolipoprotein C-III
P02790	Hemopexin
P07339	Cathepsin D
P07602	Prosaposin
P07858	Cathepsin B
P08571	Monocyte differentiation antigen CD14
P08697	Alpha-2-antiplasmin
P09871	Complement C1s subcomponent
P13591	Neural cell adhesion molecule 1
P16870	Carboxypeptidase E
P23142	Fibulin-1
P43652	Afamin
P61769	Beta-2-microglobulin
Q12907	Vesicular integral-membrane protein VIP36
P02763	Alpha-1-acid glycoprotein 1
P19652	Alpha-1-acid glycoprotein 2
P01011	Alpha-1-antichymotrypsin
P01009	Alpha-1-antitrypsin
P04217	Alpha-1B-glycoprotein
P02765	Alpha-2-HS-glycoprotein
P02647	Apolipoprotein A-I
P02652	Apolipoprotein A-II

## TBI &amp; Control CSF proteins

P06727	<i>Apolipoprotein A-IV</i>
P02654	<i>Apolipoprotein C-I</i>
P05090	<i>Apolipoprotein D</i>
P17174	<i>Aspartate aminotransferase, cytoplasmic</i>
O75882	<i>Attractin</i>
P98160	<i>Basement membrane-specific heparan sulfate proteoglycan core protein</i>
P02749	<i>Beta-2-glycoprotein 1</i>
Q96KN2	<i>Beta-Ala-His dipeptidase</i>
P55290	<i>Cadherin-13</i>
O94985	<i>Calsyntenin-1</i>
Q96IY4	<i>Carboxypeptidase B2</i>
Q9NQ79	<i>Cartilage acidic protein 1</i>
P43121	<i>Cell surface glycoprotein MUC18</i>
P00742	<i>Coagulation factor X</i>
P00748	<i>Coagulation factor XII</i>
P02452	<i>Collagen alpha-1</i>
P08123	<i>Collagen alpha-2</i>
P02746	<i>Complement C1q subcomponent subunit B</i>
P02747	<i>Complement C1q subcomponent subunit C</i>
P00736	<i>Complement C1r subcomponent</i>
Q9NZP8	<i>Complement C1r subcomponent-like protein</i>
P0C0L4	<i>Complement C4-A</i>
P01031	<i>Complement C5</i>
P13671	<i>Complement component C6</i>
P10643	<i>Complement component C7</i>
P07357	<i>Complement component C8 alpha chain</i>
P07358	<i>Complement component C8 beta chain</i>
P07360	<i>Complement component C8 gamma chain</i>
P02748	<i>Complement component C9</i>
P00746	<i>Complement factor D</i>
P08603	<i>Complement factor H</i>
Q03591	<i>Complement factor H-related protein 1</i>
P36980	<i>Complement factor H-related protein 2</i>
P05156	<i>Complement factor I</i>
P08185	<i>Corticosteroid-binding globulin</i>
Q16610	<i>Extracellular matrix protein 1</i>
P02671	<i>Fibrinogen alpha chain</i>
P02675	<i>Fibrinogen beta chain</i>
P02679	<i>Fibrinogen gamma chain</i>
P02751	<i>Fibronectin</i>
P09104	<i>Gamma-enolase</i>
P22352	<i>Glutathione peroxidase 3</i>
P69905	<i>Hemoglobin subunit alpha</i>
P68871	<i>Hemoglobin subunit beta</i>
P02042	<i>Hemoglobin subunit delta</i>
P05546	<i>Heparin cofactor 2</i>
P04196	<i>Histidine-rich glycoprotein</i>
P16403	<i>Histone H1.2</i>
P22692	<i>Insulin-like growth factor-binding protein 4</i>
P24592	<i>Insulin-like growth factor-binding protein 6</i>
Q16270	<i>Insulin-like growth factor-binding protein 7</i>
P35858	<i>Insulin-like growth factor-binding protein complex acid labile subunit</i>
P19827	<i>Inter-alpha-trypsin inhibitor heavy chain H1</i>
Q14624	<i>Inter-alpha-trypsin inhibitor heavy chain H4</i>

## TBI &amp; Control CSF proteins

P29622	<i>Kallistatin</i>
P35527	<i>Keratin, type I cytoskeletal 9</i>
P04264	<i>Keratin, type II cytoskeletal 1</i>
P01042	<i>Kininogen-1</i>
P02750	<i>Leucine-rich alpha-2-glycoprotein</i>
P51884	<i>Lumican</i>
P61626	<i>Lysozyme C</i>
P07333	<i>Macrophage colony-stimulating factor 1 receptor</i>
P01033	<i>Metalloproteinase inhibitor 1</i>
P20774	<i>Mimecan</i>
P02144	<i>Myoglobin</i>
Q96PD5	<i>N-acetylmuramoyl-L-alanine amidase</i>
O15394	<i>Neural cell adhesion molecule 2</i>
O00533	<i>Neural cell adhesion molecule L1-like protein</i>
P55058	<i>Phospholipid transfer protein</i>
P03952	<i>Plasma kallikrein</i>
P05155	<i>Plasma protease C1 inhibitor</i>
P05154	<i>Plasma serine protease inhibitor</i>
P00747	<i>Plasminogen</i>
Q15113	<i>Procollagen C-endopeptidase enhancer 1</i>
P41222	<i>Prostaglandin-H2 D-isomerase</i>
P02760	<i>Protein AMBP</i>
Q99497	<i>Protein deglycase DJ-1</i>
P06702	<i>Protein S100-A9</i>
P00734	<i>Prothrombin</i>
P14618	<i>Pyruvate kinase PKM</i>
P02753	<i>Retinol-binding protein 4</i>
P07998	<i>Ribonuclease pancreatic</i>
Q86VB7	<i>Scavenger receptor cysteine-rich type 1 protein M130</i>
P35542	<i>Serum amyloid A-4 protein</i>
P27169	<i>Serum paraoxonase/arylesterase 1</i>
O00391	<i>Sulfhydryl oxidase 1</i>
P22105	<i>Tenascin-X</i>
P05452	<i>Tetranectin</i>
P05543	<i>Thyroxine-binding globulin</i>
Q15582	<i>Transforming growth factor-beta-induced protein ig-h3</i>
P02766	<i>Transthyretin</i>
P60174	<i>Triosephosphate isomerase</i>
P02774	<i>Vitamin D-binding protein</i>
P04004	<i>Vitronectin</i>
P54289	<i>Voltage-dependent calcium channel subunit alpha-2/delta-1</i>
P25311	<i>Zinc-alpha-2-glycoprotein</i>
P63267	<i>Actin, gamma-enteric smooth muscle</i>
P05067	<i>Amyloid beta A4 protein</i>
P51693	<i>Amyloid-like protein 1</i>
O43505	<i>Beta-1,4-glucuronyltransferase 1</i>
P80723	<i>Brain acid soluble protein 1</i>
P07711	<i>Cathepsin L1</i>
P13987	<i>CD59 glycoprotein</i>
Q8TCZ2	<i>CD99 antigen-like protein 2</i>
Q8N126	<i>Cell adhesion molecule 3</i>
Q8NFZ8	<i>Cell adhesion molecule 4</i>
P10645	<i>Chromogranin-A</i>
P12109	<i>Collagen alpha-1 chain</i>



## TBI &amp; Control CSF proteins

Q12860	Contactin-1
Q9P0K1	Disintegrin and metalloproteinase domain-containing protein 22
Q13822	Ectonucleotide pyrophosphatase/phosphodiesterase family member 2
O94919	Endonuclease domain-containing 1 protein
P54764	Ephrin type-A receptor 4
P61916	Epididymal secretory protein E1
Q96KK5	Histone H2A type 1-H
P01876	Ig alpha-1 chain C region
P01857	Ig gamma-1 chain C region
P01859	Ig gamma-2 chain C region
P01860	Ig gamma-3 chain C region
P01861	Ig gamma-4 chain C region
P01764	Ig heavy chain V-III region 23
P01766	Ig heavy chain V-III region BRO
P01767	Ig heavy chain V-III region BUT
P01768	Ig heavy chain V-III region CAM
P01781	Ig heavy chain V-III region GAL
P01765	Ig heavy chain V-III region TIL
P01834	Ig kappa chain C region
P01593	Ig kappa chain V-I region AG
P01597	Ig kappa chain V-I region DEE
P01598	Ig kappa chain V-I region EU
P01613	Ig kappa chain V-I region Ni
P01606	Ig kappa chain V-I region OU
P01617	Ig kappa chain V-II region TEW
P01619	Ig kappa chain V-III region B6
P04207	Ig kappa chain V-III region CLL
P01620	Ig kappa chain V-III region SIE
P04433	Ig kappa chain V-III region VG
P04434	Ig kappa chain V-III region VH
P01625	Ig kappa chain V-IV region Len
P80748	Ig lambda chain V-III region LOI
P01714	Ig lambda chain V-III region SH
P0CG04	Ig lambda-1 chain C regions
P0CG05	Ig lambda-2 chain C regions
P0CG06	Ig lambda-3 chain C regions
Q9Y6R7	IgGFC-binding protein
B9A064	Immunoglobulin lambda-like polypeptide 5
P01344	Insulin-like growth factor II
Q92876	Kallikrein-6
O94772	Lymphocyte antigen 6H
P04156	Major prion protein
P41271	Neuroblastoma suppressor of tumorigenicity 1
P05408	Neuroendocrine protein 7B2
Q92823	Neuronal cell adhesion molecule
O95502	Neuronal pentraxin receptor
O15240	Neurosecretory protein VGF
Q02818	Nucleobindin-1
P10451	Osteopontin
Q96FE7	Phosphoinositide-3-kinase-interacting protein 1
Q9H3G5	Probable serine carboxypeptidase CPVL
Q9UHG2	ProSAAS
Q92520	Protein FAM3C
Q99435	Protein kinase C-binding protein NELL2

P05060	Secretogranin-1
P13521	Secretogranin-2
O75326	Semaphorin-7A
Q5TFQ8	Signal-regulatory protein beta-1 isoform 3
P04216	Thy-1 membrane glycoprotein
P13611	Versican core protein
Q8TAG5	V-set and transmembrane domain-containing protein 2A
Q8TEU8	WAP, Kazal, immunoglobulin, Kunitz and NTR domain-containing protein 2

## Healthy CSF proteins only

<i>P11021</i>	<i>78 kDa glucose-regulated protein</i>
<i>P24593</i>	<i>Insulin-like growth factor-binding protein 5</i>
<i>Q08431</i>	<i>Lactadherin</i>
<i>P04180</i>	<i>Phosphatidylcholine-sterol acyltransferase</i>
<i>Q06481</i>	<i>Amyloid-like protein 2</i>
<i>Q16620</i>	<i>BDNF/NT-3 growth factors receptor</i>
<i>P11362</i>	<i>Fibroblast growth factor receptor 1</i>
<i>P22304</i>	<i>Iduronate 2-sulfatase</i>
<i>Q86UX2</i>	<i>Inter-alpha-trypsin inhibitor heavy chain H5</i>
<i>Q96KG7</i>	<i>Multiple epidermal growth factor-like domains protein 10</i>
<i>P23471</i>	<i>Receptor-type tyrosine-protein phosphatase zeta</i>
<i>Q9NPR2</i>	<i>Semaphorin-4B</i>
<i>O14773</i>	<i>Tripeptidyl-peptidase 1</i>
<i>P30530</i>	<i>Tyrosine-protein kinase receptor UFO</i>
<i>Q99969</i>	<i>Retinoic acid receptor responder protein 2</i>
<i>P26992</i>	<i>Ciliary neurotrophic factor receptor subunit alpha</i>
<i>O95967</i>	<i>EGF-containing fibulin-like extracellular matrix protein 2</i>
<i>P21802</i>	<i>Fibroblast growth factor receptor 2</i>
<i>P98095</i>	<i>Fibulin-2</i>
<i>Q8NBJ4</i>	<i>Golgi membrane protein 1</i>
<i>P21246</i>	<i>Pleiotrophin</i>
<i>O15031</i>	<i>Plexin-B2</i>
<i>P51888</i>	<i>Prolargin</i>
<i>O60883</i>	<i>Prosaposin receptor GPR37L1</i>
<i>O75711</i>	<i>Scrapie-responsive protein 1</i>
<i>Q9Y646</i>	<i>Carboxypeptidase Q</i>
<i>Q01459</i>	<i>Di-N-acetylchitobiase</i>
<i>P40189</i>	<i>Interleukin-6 receptor subunit beta</i>
<i>Q92859</i>	<i>Neogenin</i>
<i>Q6UX71</i>	<i>Plexin domain-containing protein 2</i>
<i>P23470</i>	<i>Receptor-type tyrosine-protein phosphatase gamma</i>
<i>O60241</i>	<i>Adhesion G protein-coupled receptor B2</i>
<i>P49641</i>	<i>Alpha-mannosidase 2x</i>
<i>P55283</i>	<i>Cadherin-4</i>
<i>Q9BY67</i>	<i>Cell adhesion molecule 1</i>
<i>Q9Y287</i>	<i>Integral membrane protein 2B</i>
<i>Q9HCB6</i>	<i>Spondin-1</i>
<i>P08253</i>	<i>72 kDa type IV collagenase</i>
<i>P27797</i>	<i>Calreticulin</i>
<i>P02461</i>	<i>Collagen alpha-1 chain</i>
<i>P12111</i>	<i>Collagen alpha-3 chain</i>
<i>P14625</i>	<i>Endoplasmin</i>
<i>Q9UBQ6</i>	<i>Exostosin-like 2</i>
<i>P14314</i>	<i>Glucosidase 2 subunit beta</i>
<i>O75144</i>	<i>ICOS ligand</i>
<i>P33908</i>	<i>Mannosyl-oligosaccharide 1,2-alpha-mannosidase IA</i>

## Healthy CSF proteins only

P16035	<i>Metalloproteinase inhibitor 2</i>
Q7Z7M0	<i>Multiple epidermal growth factor-like domains protein 8</i>
P32004	<i>Neural cell adhesion molecule L1</i>
P14543	<i>Nidogen-1</i>
P23515	<i>Oligodendrocyte-myelin glycoprotein</i>
Q6UXB8	<i>Peptidase inhibitor 16</i>
P23284	<i>Peptidyl-prolyl cis-trans isomerase B</i>
Q96S96	<i>Phosphatidylethanolamine-binding protein 4</i>
Q96NZ9	<i>Proline-rich acidic protein 1</i>
Q9NYQ8	<i>Protocadherin Fat 2</i>
P23468	<i>Receptor-type tyrosine-protein phosphatase delta</i>
Q13332	<i>Receptor-type tyrosine-protein phosphatase S</i>
P34096	<i>Ribonuclease 4</i>
Q9Y6N7	<i>Roundabout homolog 1</i>
Q8WZ42	<i>Titin</i>
Q24JP5	<i>Transmembrane protein 132A</i>
Q9BRK5	<i>45 kDa calcium-binding protein</i>
O94910	<i>Adhesion G protein-coupled receptor L1</i>
O00468	<i>Agrin</i>
P07686	<i>Beta-hexosaminidase subunit beta</i>
Q9BQT9	<i>Calsyntenin-3</i>
Q8N3J6	<i>Cell adhesion molecule 2</i>
Q99674	<i>Cell growth regulator with EF hand domain protein 1</i>
Q6UW01	<i>Cerebellin-3</i>
Q16568	<i>Cocaine- and amphetamine-regulated transcript protein</i>
P39060	<i>Collagen alpha-1 chain</i>
P08174	<i>Complement decay-accelerating factor</i>
Q02246	<i>Contactin-2</i>
Q9C0A0	<i>Contactin-associated protein-like 4</i>
P07585	<i>Decorin</i>
P09417	<i>Dihydropteridine reductase</i>
P52799	<i>Ephrin-B2</i>
O94769	<i>Extracellular matrix protein 2</i>
Q8IWU5	<i>Extracellular sulfatase Sulf-2</i>
Q9UBX5	<i>Fibulin-5</i>
P14207	<i>Folate receptor beta</i>
Q6MZW2	<i>Follistatin-related protein 4</i>
O00451	<i>GDNF family receptor alpha-2</i>
P48058	<i>Glutamate receptor 4</i>
Q16769	<i>Glutaminyl-peptide cyclotransferase</i>
Q9Y2T3	<i>Guanine deaminase</i>
Q8IZP7	<i>Heparan-sulfate 6-O-sulfotransferase 3</i>
P18136	<i>Ig kappa chain V-III region HIC</i>
P01622	<i>Ig kappa chain V-III region Ti</i>
Q969P0	<i>Immunoglobulin superfamily member 8</i>
Q9NX62	<i>Inositol monophosphatase 3</i>
Q9UMF0	<i>Intercellular adhesion molecule 5</i>
O43291	<i>Kunitz-type protease inhibitor 2</i>
Q8N2S1	<i>Latent-transforming growth factor beta-binding protein 4</i>
Q9NT99	<i>Leucine-rich repeat-containing protein 4B</i>
P42785	<i>Lysosomal Pro-X carboxypeptidase</i>
P09603	<i>Macrophage colony-stimulating factor 1</i>
P22897	<i>Macrophage mannose receptor 1</i>
P55083	<i>Microfibril-associated glycoprotein 4</i>

## Healthy CSF proteins only

Q16653	Myelin-oligodendrocyte glycoprotein
Q9NY97	N-acetyllactosaminide beta-1,3-N-acetylglucosaminyltransferase 2
Q9ULB1	Neurexin-1
Q9P2S2	Neurexin-2
Q9Y4C0	Neurexin-3
Q9NPD7	Neuritin
O94856	Neurofascin
Q7Z3B1	Neuronal growth regulator 1
Q15818	Neuronal pentraxin-1
P47972	Neuronal pentraxin-2
Q5BLP8	Neuropeptide-like protein C4orf48
Q99574	Neuroserpin
Q14112	Nidogen-2
Q14982	Opioid-binding protein/cell adhesion molecule
Q99983	Osteomodulin
P19021	Peptidyl-glycine alpha-amidating monooxygenase
P01127	Platelet-derived growth factor subunit B
Q9NZ53	Podocalyxin-like protein 2
P01210	Proenkephalin-A
Q5FWE3	Proline-rich transmembrane protein 3
P01303	Pro-neuropeptide Y
O15354	Prosaposin receptor GPR37
O60888	Protein CutA
P48745	Protein NOV homolog
Q8WZA1	Protein O-linked-mannose beta-1,2-N-acetylglucosaminyltransferase 1
Q9Y5F6	Protocadherin gamma-C5
C9JVV0	Putative transmembrane protein INAFM1
Q92932	Receptor-type tyrosine-protein phosphatase N2
Q16849	Receptor-type tyrosine-protein phosphatase-like N
P78509	Reelin
O75787	Renin receptor
Q9BZR6	Reticulon-4 receptor
Q6NW40	RGM domain family member B
Q93091	Ribonuclease K6
Q9BYH1	Seizure 6-like protein
Q6UXD5	Seizure 6-like protein 2
Q53EL9	Seizure protein 6 homolog
Q96PX8	SLIT and NTRK-like protein 1
Q8WVQ1	Soluble calcium-activated nucleotidase 1
Q9H4F8	SPARC-related modular calcium-binding protein 1
O60279	Sushi domain-containing protein 5
Q08629	Testican-1
Q92563	Testican-2
O43493	Trans-Golgi network integral membrane protein 2
O75509	Tumor necrosis factor receptor superfamily member 21
Q6UX73	UPF0764 protein C16orf89
Q9UPU3	VPS10 domain-containing receptor SorCS3
A6NLU5	V-set and transmembrane domain-containing protein 2B
Q15904	V-type proton ATPase subunit S1
Q9ULF5	Zinc transporter ZIP10

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## LEGEND to TABLE 6: TBI patients and control subjects CSF proteomes

Analytical mass spectrometry, by LC-MS/MS on LTQ-Orbitrap and Q-Exactive Orbitrap mass spectrometers was conducted on CSF from 19 severe and moderate TBI patients and 9 Control donors. Proteins were identified by MASCOT database searching (SwissProt/Uniprot Homo sapiens, 95% peptide confidence) to arrive at cumulative conservative TBI and healthy CSF protein lists using same conditions. These CSF proteomes served to determine the clinical presence of a previously identified astrocytic trauma-release proteome<sup>1</sup>. Proteins from this mouse trauma-release proteome that are also found in TBI CSF are highlighted in roseate<sup>1</sup>. Astrocyte-enriched proteins from a gene array study are highlighted in yellow<sup>2</sup>. Trauma-released and astrocyte-enriched proteins are highlighted in red. *Italics* indicate proteins present in healthy plasma proteomes<sup>3,4</sup>.

## PROTEOME TABLE REFERENCES

1. Levine J, Kwon E, Sondej M, et al. Traumatically injured astrocytes release a proteomic signature modulated by STAT3 dependent cell survival. *Glia*. 2016; 64: 668-94.
2. Cahoy JD, Emery B, Kaushal A, et al. A transcriptome database for astrocytes, neurons, and oligodendrocytes: a new resource for understanding brain development and function. *The Journal of neuroscience : the official journal of the Society for Neuroscience*. 2008; 28: 264-78.
3. Omenn GS, States DJ, Adamski M, et al. Overview of the HUPO Plasma Proteome Project: results from the pilot phase with 35 collaborating laboratories and multiple analytical groups, generating a core dataset of 3020 proteins and a publicly-available database. *Proteomics*. 2005; 5: 3226-45.
4. Schenk S, Schoenhals GJ, de Souza G and Mann M. A high confidence, manually validated human blood plasma protein reference set. *BMC Med Genomics*. 2008; 1: 41.