

APPENDIX 1. LIST OF PROTEINS IDENTIFIED IN THE PROTEIN EXTRACTS BY LC-MS-MS

Accession No from NCBI Entrez Protein database	Proteins	LotB /Exp	LotB /Rep	LotB /AQ	LotB /CC	GalA /Exp	GalA /Rep	GalA /AQ	GalA /CC	SenA /Exp	SenA /Rep	SenA /AQ	SenA /CC	BalA /Exp	BalA /Rep	BalA /AQ	BalA /CC
Number of lenses/patients pooled		5	5	5	5	5	5	5	5	5	5	5	5	1	2	2	2
Number of detected proteins		11	17	12	4	27	12	24	11	6	20	28	9	9	20	21	10
Cut-off score (i.e. ion score above which there is 95% condifence of protein identification)		50	40	50	50	44	39	45	40	39	43	43	50	50	39	42	40
Major Tear Proteins																	
gi 220950	Lysozyme	124/5*	90/5	206/10	95/2	176/7		87/3	124/10		137/6	147/5	169/7	118/15	167/28	218/17	152/23
gi 4504963	Lipocalin 1	83/2		78/2	83/1	59/2	50/1	53/2	42/1		59/2	97/3	196/4	74/2	56/2		121/4
gi 186833	Lactoferrin		124/5	80/2		72/3	106/2	150/6			146/6	78/2			159/4	62/2	144/5
Immunoglobulin family																	
gi 70058 or gi 113585	Heavy chain of IgA2	62/1		59/1		63/1	118/4	177/6	89/2	106/2	201/7	197/7					40/1
gi 184665	Light chain of IgA1					53/2											
gi 400044	Immunoglobulin J chain					44/2	70/1	65/1		84/2	93/2	106/3				65/2	50/1
gi 27922831	Large anti-HSV-glycoprotein D single chain antibody					187/8					212/7	314/8			146/3	196/5	
gi 87919	Heavy chain of IgM					96/5		73/3				62/3			51/2		
gi 441359	Ig kappa light chain					65/2					82/1				76/2		
gi 227950	Ig rheumatoid factor H											116/2					
gi 118405920	Immunoglobulin heavy chain variable region					66/2									115/3		
gi 514366	Poly-Ig receptor (secretory component)					134/3		124/4				112/3				43/1	
Proline Rich Proteins																	
gi 6005802	Proline rich 4 isoform 1 or 2 (lacrimal)	92/3				125/4		112/3	116/2		95/2	117/3	114/3	97/4	168/7	131/5	80/4
gi 22208536	Nasopharyngeal carcinoma associated proline rich 4					107/2		91/2				70/2	77/2	75/2			

gi 94400783	Basic proline-rich protein (Lacrimal) (pHL E1F1)	91/2	159/4	91/2	74/1				112/3			113/4		105/5	
Apolipoproteins															
gi 178855	Apolipoprotein J/Clusterin	129/2			122/4	75/2			53/2			101/1	57/2		
gi 178775	Apolipoprotein A-1											43/1		66/3	
Albumin															
gi 28592	Serum albumin				45/2	129/4	125/2		117/5	383/19	196/4	57/3			
Hemoglobins															
gi 122286	Hemoglobin subunit alpha				68/4			93/6			197/10				
gi 122577	Hemoglobin subunit beta								75/3						
Complement proteins															
gi 179726	C9 complement protein				116/4				59/2			59/2			
gi 179665	Complement component C3								60/3						
Keratins															
gi 11935049	Keratin 1 (stratum corneum/keratinocytes – keratin 10/9 pair)	463/10			325/11	265/7	137/4	424/12	70/1	110/4	79/2		78/2	440/9	166/5
gi 547754	Keratin 2 (stratum corneum/keratinocytes – keratin 10/9 pair)				421/12	80/3		197/4				128/4			
gi 34041	Keratin 3 (cornea – keratin 12 pair)											44/1			
gi 27769210	Keratin 4 (stratified epithelium – keratin 13 pair)	199/6													
gi 4557890	Keratin 5 (stratified epithelium – keratin 14/15 pair)	66/2	185/5	120/2											
gi 386849	Keratin 6											108/4			
gi 55956899	Keratin 9 (stratum corneum/keratinocytes – keratin 1/2 pair)				135/3		203/4							84/2	
gi 623409	Keratin – 10 (stratum corneum/keratinocytes – keratin 1/2 pair)	122/6			285/9	147/3	129/5	405/7	148/3	205/7	214/6		176/6		
gi 4557699	Keratin 12 (cornea – keratin 3 pair)				73/3										
gi 34033	Keratin 13 (stratified epithelium – keratin 4 pair)	202/7													

gi 114667176	Keratin 14 (stratified epithelium – keratin 5 pair)	395/8	458/15	217/7	254/9	251/7	146/6
gi 125081	Keratin 15 (stratified epithelium – keratin 5 pair)			46/3			
gi 82190152	Keratin 18 (simple epithelia – keratin 8 pair)					58/4	
gi 125090	Keratin, type I (Hair keratin)		353/10		335/13		

Proteoglycans and mucins/mucin-like proteins

gi 184427	Heparan sulphate proteoglycan	1156/29	834/33	137/5	667/26	182/6	738/18	1324/61	172/7
gi 62088962	DMBT-1, isoform b precursor variant	78/1		105/1	69/2			61/2	

Other proteins

gi 4505821	Prolactin-induced protein			68/1					134/3	58/1	
gi 662841	Heat shock protein 27		66/3	104/2						57/1	63/2
gi 55636185	Predicted protein, similar to Mammaglobin A precursor								71/2		
gi 46255041 or gi 20988599	Retinoic acid receptor responder 1, isoform 1 or 2	158/5	139/3		115/3	140/5		52/1	51/1	94/2	147/5 161/6
gi 350218	Peptide PB saliva				58/4		80/4				
gi 350217	Peptide PA saliva										60/4
gi 553788	Transferrin							54/2	50/1		
gi 178375	Aldehyde dehydrogenase					56/2					
gi 32015	Alpha - tubulin				49/1				55/1		
gi 2392230	Chain A, Human cathepsin G								57/2		40/1
gi 16751921	Dermcidin preproprotein		43/1		58/2	91/2	45/1		57/1		
gi 223130	Fibrinogen betaB 1-118		56/2			41/1		52/2			
gi 31397	Fibronectin								55/2		
gi 8051586	Ficolin 2 isoform b				68/2		58/2				
gi 15187164	Lacritin									159/3	
gi 1374696	Pre-pro-megakaryocyte potentiating factor			64/1							

gi 35959	Tubulin 5 - beta						41/1	65/2
gi 13477169	Vitronectin precursor	49/1	111/3	75/3	49/2	93/3		47/3
gi 1145724	Mesothelin or CAK1 antigen precursor							43/2
gi 30584775	Matrix Gla protein			54/2				
gi 4504447	Heterogenous nuclear ribonucleoproteins A2/B1 isoform A2	163/3						
gi 133254	Heterogenous nuclear ribonucleoproteins A1	87/1						
gi 34740329	Heterogenous nuclear ribonucleoproteins A3	58/1						
gi 190026	Plasminogen	46/2						
gi 31075	E-cadherin						56/1	
gi 235948	Cystatin SA-III						50/1	
gi 119572363	hCG22067	41/1		49/1	41/1			
gi 162794	Alpha-S1-casein				43/1	46/1		
gi 113218	Actin							42/1
gi 5453914	Phospholipid transfer protein isoform a							69/4

*The numbers = the ions scores of database search for the identifications/numbers of peptides used in the identification.