

Appendix 5

The percent coverage and the number of unique peptides identified for each of the eighteen novel crystallin proteins are listed for each age at which the protein was identified. Percent coverage was determined by the number of amino acids in all of the peptides identified by shotgun proteomics for each protein divided by the total number of amino acids in the protein sequence. The number of unique peptides refers to the peptide sequences identified by shotgun proteomics that are unique to an individual parent protein sequence.

Novel Crystallin	4.5 days	3 weeks	6 weeks	6 months
Beta A1c	34%, 7	19%, 4	19%, 2	65%, 14
Beta A1d	63%, 30	72%, 36	76%, 40	71%, 24
Beta B1b	74%, 37	74%, 53	86%, 53	66%, 18
Beta B1c	83%, 35	69%, 46	90%, 64	68%, 32
Beta B1d	NA	NA	22%, 2	73%, 7
Gamma M1d	28%, 3	76%, 21	82%, 25	34%, 7
Gamma M2d9	93%, 8	NA	92%, 3	NA
Gamma M2d10	80%, 2	93%, 12	92%, 2	55%, 4
Gamma M2d11	NA	74%, 1	84%, 2	NA
Gamma M2d12	73%, 14	86%, 27	88%, 24	31%, 1
Gamma M2d13	56%, 11	82%, 25	86%, 20	46%, 5
Gamma M2d14	48%, 6	NA	81%, 5	NA
Gamma M2d15	79%, 13	92%, 19	93%, 20	29%, 6
Gamma M2d16	NA	93%, 5	92%, 5	NA
Gamma M2e	NA	82%, 20	85%, 30	71%, 9
Gamma M2f	NA	62%, 7	75%, 11	41%, 3
Gamma MXb	NA	8%, 1	15%, 3	6%, 1
Gamma MXc	64%, 19	77%, 24	87%, 16	56%, 7