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# βB1-crystallin (m): 293T Lysate: sc-118649

## BACKGROUND

Crystallins are the major proteins of the vertebrate eye lens, where they maintain the transparency and refractive index of the lens. Crystallins are divided into  $\alpha$ ,  $\beta$ , and  $\gamma$  families, and the  $\beta$ - and  $\gamma$ -crystallins also comprise a superfamily. Crystallins usually contain seven distinctive protein regions, including four homologous motifs, a connecting peptide, and N- and C-terminal extensions.  $\beta$ -crystallins constitute the major lens structural proteins, and they associate into dimers, tetramers, and higher order aggregates. The  $\beta$ -crystallin subfamily is composed of several gene products, including  $\beta$ A1-,  $\beta$ A2-,  $\beta$ A3-,  $\beta$ A4-,  $\beta$ B1-,  $\beta$ B2- and  $\beta$ B3-crystallin. The  $\beta$ A1- and  $\beta$ A3-crystallin proteins are encoded by a single mRNA. They differ by only 17 amino acids, and  $\beta$ A1-crystallin is generated by use of an alternate translation initiation site.

## REFERENCES

1. Hope, J.N., Chen, H.C. and Hejtmancik, J.F. 1994.  $\beta$ A3/A1-crystallin association: role of the N-terminal arm. *Protein Eng.* 7: 445-451.
2. Hejtmancik, J.F., Wingfield, P.T., Chambers, C., Russell, P., Chen, H.C., Sergeev, Y.V. and Hope, J.N. 1997. Association properties of  $\beta$ B2- and  $\beta$ A3-crystallin: ability to form dimers. *Protein Eng.* 10: 1347-1352.
3. Werten, P.J., Stege, G.J. and de Jong, W.W. 1999. The short 5' untranslated region of the  $\beta$ A3/A1-crystallin mRNA is responsible for leaky ribosomal scanning. *Mol. Biol. Rep.* 26: 201-205.
4. Evans, P., Wyatt, K., Wistow, G.J., Bateman, O.A., Wallace, B.A. and Slingsby, C. 2004. The P23T cataract mutation causes loss of solubility of folded  $\gamma$ D-crystallin. *J. Mol. Biol.* 343: 435-444.
5. Yang, Y., Chauhan, B.K., Cveklova, K. and Cvekl, A. 2004. Transcriptional regulation of mouse  $\alpha$ B- and  $\gamma$ F-crystallin genes in lens: opposite promoter-specific interactions between Pax6 and large Maf transcription factors. *J. Mol. Biol.* 344: 351-368.
6. Gangalum, R.K., Schibler, M.J. and Bhat, S.P. 2004. Small heat shock protein  $\alpha$ B-crystallin is part of cell cycle-dependent Golgi reorganization. *J. Biol. Chem.* 279: 43374-43377.
7. Kamradt, M.C., Lu, M., Werner, M.E., Kwan, T., Chen, F., Strohecker, A., Oshita, S., Wilkinson, J.C., Yu, C., Oliver, P.G., Duckett, C.S., Buchsbaum, D.J., LoBuglio, A.F., Jordan, V.C. and Cryns, V.L. 2005. The small heat shock protein  $\alpha$ B-crystallin is a novel inhibitor of TRAIL-induced apoptosis that suppresses the activation of caspase-3. *J. Biol. Chem.* 280: 11059-11066.
8. LocusLink Report (LocusID: 1411). <http://www.ncbi.nlm.nih.gov/LocusLink/>

## CHROMOSOMAL LOCATION

Genetic locus: Crybb1 (mouse) mapping to 5 F.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PRODUCT

$\beta$ B1-crystallin (m): 293T Lysate represents a lysate of mouse  $\beta$ B1-crystallin transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## APPLICATIONS

$\beta$ B1-crystallin (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive  $\beta$ B1-crystallin antibodies. Recommended use: 10-20  $\mu$ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

## PROTOCOLS

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