

# **Product datasheet for TA375119**

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OriGene Technologies, Inc.

## Alpha B Crystallin (CRYAB) Rabbit Polyclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

Applications: WB

**Reactivity:** WB,1:500 - 1:2000 Human, Mouse, Rat

Modifications: Unmodified

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

Immunogen: Recombinant fusion protein containing a sequence corresponding to amino acids 1-175 of

human CRYAB (NP\_001876.1).

**Formulation:** Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.

**Concentration:** lot specific

**Purification:** Affinity purification

**Conjugation:** Unconjugated

Storage: Store at -20°C. Avoid freeze / thaw cycles.

**Stability:** Shelf life: one year from despatch.

Predicted Protein Size: 20kDa

**Gene Name:** crystallin alpha B

Database Link: Entrez Gene 1410 Human

P02511

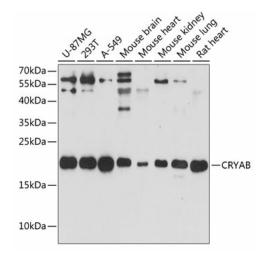


#### Background:

Mammalian lens crystallins are divided into alpha, beta, and gamma families. Alpha crystallins are composed of two gene products: alpha-A and alpha-B, for acidic and basic, respectively. Alpha crystallins can be induced by heat shock and are members of the small heat shock protein (HSP20) family. They act as molecular chaperones although they do not renature proteins and release them in the fashion of a true chaperone; instead they hold them in large soluble aggregates. Post-translational modifications decrease the ability to chaperone. These heterogeneous aggregates consist of 30-40 subunits; the alpha-A and alpha-B subunits have a 3:1 ratio, respectively. Two additional functions of alpha crystallins are an autokinase activity and participation in the intracellular architecture. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Alpha-A and alpha-B gene products are differentially expressed; alpha-A is preferentially restricted to the lens and alpha-B is expressed widely in many tissues and organs. Elevated expression of alpha-B crystallin occurs in many neurological diseases; a missense mutation cosegregated in a family with a desmin-related myopathy. Alternative splicing results in multiple transcript variants.

Synonyms: Alpha(B)-crystallin; CRYA2; CTPP2; HspB5

### **Product images:**



Western blot analysis of extracts of various cell lines, using CRYAB antibody (TA375119) at 1:3000 dilution. |Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. |Lysates/proteins: 25ug per lane. |Blocking buffer: 3% nonfat dry milk in TBST. |Detection: ECL Basic Kit. |Exposure time: 60s.