

Product datasheet for TA326429

OriGene Technologies, Inc.

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Alpha B Crystallin (CRYAB) Mouse Monoclonal Antibody [Clone ID: 3A10.H4]

Product data:

Product Type: Primary Antibodies

Clone Name: 3A10.H4

Applications: WB

Recommended Dilution: WB: 1:2000

Reactivity: Human, Bovine

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Native Alpha B Crystallin

Formulation: PBS pH7.2, 50% glycerol, 0.09% sodium azide

Concentration: lot specific

Purification: Protein G Purified

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Gene Name: crystallin alpha B

Database Link: NP 001876

Entrez Gene 1410 Human

P02511





Background:

The alpha-crystallins are major water-soluble lens structural proteins of the vertebrate eye that are related to the small heat shock protein family. The alpha-crystallins possess structural and functional similarities with Hsp25 and Hsp27. Mammalian lens cystallins are divided into alpha, beta and gamma families. Alpha and beta families are further divided into acidic and basic groups (Alpha-A and Alpha-B respectively). In the lens, alpha-crystallin primarily functions to maintain proper refractive index, however it can also function as a molecular chaperone that binds to the denatured proteins, keeping them in solution and thereby maintaining the translucency of the lens. When cellular stress occurs, alpha-crystallin enters its phosphorylated state and may serve a structural control function and play a role in protein maintenance. In addition to their interaction with proteins, alpha-crystallins also interact with native molecules such as membrane proteins, Golgi matrix protein, structural proteins, nuclear proteins and DNA. Two other functions are an autokinase activity and participation in the intracellular architecture, and it has also been proven that both alpha-A and B prevent apoptosis by inhibiting caspases . Specifically, alpha-B cystallin is found in many cells and organs outside the lens, and alpha B is overexpressed in several neurological disorders and in cell lines under stress conditions.

Synonyms:

CMD1II; CRYA2; CTPP2; CTRCT16; HEL-S-101; HSPB5; MFM2

Note:

Detects a band at ~20kDa (predicted mol.weight is ~21kDa) corresponding to aB-crystallin. Does not cross-react with aA-crystallin, β L-crystallin, β H-crystallin, β H-cryst

Product images:

