

Anti-Alpha B Crystallin Monoclonal Antibody

ORDERING INFORMATION

Catalog No.: 11083 (clone 3A10.C9)
Size: 100ug in PBS, pH 7.4, purified by Protein G affinity chromatography.

BACKGROUND

Alpha crystallins are water-soluble lens proteins of the vertebrate eye that are related to the small heat shock protein family. Lens crystallins are divided into alpha, beta, and gamma families. Alpha crystallins are further divided into acidic (Alpha A) and basic (Alpha B) groups. In the lens, alpha crystallin maintains proper refractive index, however it can also function as a molecular chaperone that binds to denatured proteins, keeping them in solution and maintaining the translucency of the lens. In response to cellular stress, alpha crystallin is phosphorylated and may serve a structural control function and play a role in protein maintenance. Both alpha A and alpha B crystallin prevent apoptosis by inhibiting caspases. Alpha B crystallin is found in many cells and organs outside the lens and is over-expressed in cells subjected to stress conditions and in several neurological disorders.

SPECIFICATION SUMMARY

Antigen: Native alpha B crystallin
Host Species: Mouse
Antibody Class: IgG1
Preservatives: None

SPECIFICITY

This antibody recognizes human and bovine alpha B crystallin. It does not cross-react with alpha A crystallin, beta-L crystallin, beta-H crystallin, gamma crystallin, Hsp25, Hsp27, or Hsp47 proteins.

APPLICATIONS

Immunoblotting: use at 0.5-1ug/ml. A band of ~20-21 kDa is detected.
ELISA: use at 1ug/ml.
These are recommended concentrations. User should determine optimal concentrations for their application.
Positive control: Purified alpha B crystallin.

DILUTION INSTRUCTIONS

Dilute in PBS or medium which is identical to that used in the assay system.

STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Avoid repeated freezing and thawing.

For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.