bs-4651R

[Primary Antibody]

www.bioss.com.cn sales@bioss.com.cn techsupport@bioss.com.cn 400-901-9800

Alpha B Crystallin Rabbit pAb

DATASHEET -

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

GenelD: 1410 SWISS: P02511

Target: Alpha B Crystallin

Immunogen: KLH conjugated synthetic peptide derived from human Alpha B

Crystallin.: 51-150/175.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50%

Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated

freeze/thaw cycles.

Background: Crystallins are separated into two classes: taxon-specific, or enzyme, and ubiquitous. The latter class constitutes the major proteins of vertebrate eye lens and maintains the transparency and refractive index of the lens. Since lens central fiber cells lose their nuclei during development, these crystallins are made and then retained throughout life, making them extremely stable proteins. Mammalian lens crystallins are divided into alpha, beta, and gamma families; beta and gamma crystallins are also considered as a superfamily. Alpha and beta families are further divided into acidic and basic groups. Seven protein regions exist in crystallins: four homologous motifs, a connecting peptide, and N- and Cterminal extensions. 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 (sHSP also known as the 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. 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. [provided by RefSeq, Jul 2008].

Applications: IHC-P (1:100-500)

IHC-F (1:100-500) **IF** (1:100-500)

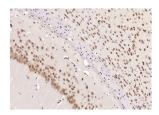
Reactivity: Mouse, Rat

(predicted: Human, Pig, Cow, Dog, Horse)

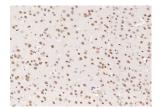
Predicted 20 kDa MW.:

Subcellular Cytoplasm ,Nucleus

VALIDATION IMAGES



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Alpha B Crystallin) Polyclonal Antibody, Unconjugated (bs-4651R) at 1:400



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by microwave in sodium citrate buffer (pH6.0) : Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes; Blocking buffer (3% BSA) at RT for 30min; Antibody incubation with (Alpha B Crystallin) Polyclonal Antibody, Unconjugated (bs-4651R) at 1:400 overnight at overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

4°C, followed by conjugation to the secondary antibody (labeled with HRP)and DAB staining.

- SELECTED CITATIONS -

• [IF=6.208] Xingdong Wang. et al. Single-Cell RNA Sequencing Reveals Atlas of Yak Testis Cells. INT J MOL SCI. 2023 Jan;24(9):7982 IHC; Bovine. 37175687