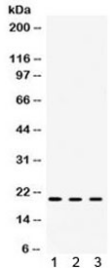
Alpha A Crystallin Antibody / CRYAA (R32408)

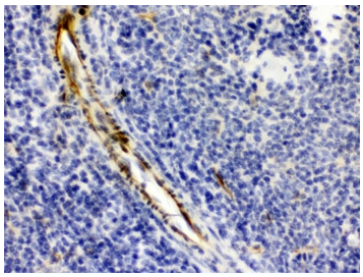
Catalog No.	Formulation	Size
R32408	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

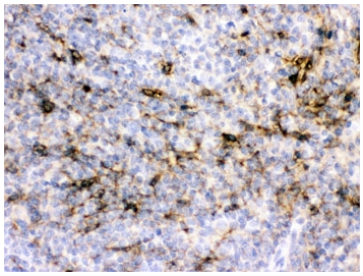
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P02489
Localization	Nuclear, cytoplasmic
Applications	Western Blot : 0.1-0.5ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml Flow Cytometry : 1-3ug/10^6 cells
Limitations	This Alpha A Crystallin antibody is available for research use only.



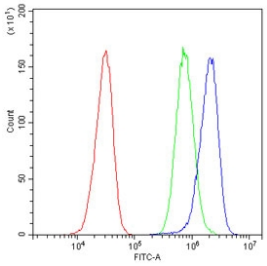
Western blot testing of 1) rat spleen, 2) mouse eye and 3) human SMMC-7721 lysate with Alpha A Crystallin antibody. Expected molecular weight: 20-23 kDa.



IHC testing of FFPE mouse spleen with Alpha A Crystallin antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to testing.



IHC testing of FFPE rat spleen with Alpha A Crystallin antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to testing.



Flow cytometry testing of human HepG2 cells with Alpha A Crystallin antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Alpha A Crystallin antibody.

Description

Alpha-crystallin A chain is a protein that in humans is encoded by the CRYAA gene. 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. 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. Defects in this gene cause autosomal dominant congenital cataract (ADCC).

Application Notes

Optimal dilution of the Alpha A Crystallin antibody should be determined by the researcher.

Immunogen

Amino acids M1-S173 from the human protein were used as the immunogen for the Alpha A Crystallin antibody.

Storage

After reconstitution, the Alpha A Crystallin antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com