For Research Use Only

Alpha B Crystallin Polyclonal antibody



Catalog Number: 15808-1-AP

Featured Product

12 Publications

Basic Information

Catalog Number: 15808-1-AP Size: 350 μg/ml Source:

Rabbit Isotype:

Immunogen Catalog Number:

AG8543

GenBank Accession Number:

BC007008 GeneID (NCBI): 1410 **UNIPROT ID:** P02511 Full Name:

crystallin, alpha B Calculated MW: 175 aa, 20 kDa

Observed MW: 20-22 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions: WB 1:2000-1:10000

IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:50-1:500 IF 1:50-1:500

Applications

Tested Applications: IF/ICC, IHC, IP, WB, ELISA

Cited Applications: WB, IF, IHC, ELISA Species Specificity: human, mouse, rat **Cited Species:**

human, mouse, fish

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

WB: mouse heart tissue, U2OS cells, rat heart tissue, mouse skeletal muscle tissue, rat skeletal muscle tissue

IP: U2OS cells,

IHC: mouse eye tissue, mouse heart tissue

IF: U2OS cells,

Background Information

Alpha B-crystallin, encoded by CRYAB gene, is multifunctional, serving as both a major structural protein in the lens and a small heat-shock protein in other tissues in mammals. Alpha B-crystallin may contribute to the transparency and refractive index of the lens. Single nucleotide polymorphisms (SNPs) in the promoter region of CRYAB gene have been associated with in multiple sclerosis. Mutations in the CRYAB gene cause distinct clinical phenotypes including isolated posterior polar cataract, myofibrillar myopathy, cardiomyopathy, or a multisystemic disorder combining all these features. Impairment of alpha-B crystallin dimerization may be relevant to the pathogenesis of these disorders.

Notable Publications

Author	Pubmed ID	Journal	Application
Daniele Vergara	29138676	Oxid Med Cell Longev	WB
Thomas G Martin	34487557	J Cell Biochem	WB
Yuchen Yang	33839756	Brief Bioinform	IF

Storage

Store at -20°C. Stable for one year after shipment.

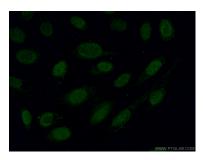
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

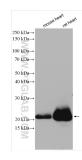
Selected Validation Data



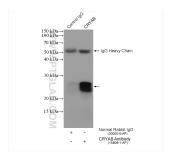
Immunohistochemical analysis of paraffinembedded mouse eye tissue slide using 15808-1-AP (Alpha B Crystallin antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed U2OS cells using 15808-1-AP (Alpha B Crystallin antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Various lysates were subjected to SDS PAGE followed by western blot with 15808-1-AP (Alpha B Crystallin antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



IP result of anti-Alpha B Crystallin (IP:15808-1-AP, 4ug; Detection:15808-1-AP 1:500) with U2OS cells lysate 1800 ug.