

Recombinant

DGRmAb®

alpha B Crystallin (DGR12950) Rabbit mAb

db11173

Package : 10µL 20µL 50µL 100µL

Product Name : alpha B Crystallin (DGR12950) Rabbit mAb**Cat.No.:** db11173**Synonyms** : MFM2; CRYA2; CTPP2; HSPB5; CMD1II; CTRCT16; HEL-S-101**Application** : WB, IHC-P, ICC/IF, IP**Reactivity** : Human,Rat**Host species** : Rabbit**Background**

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. 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. 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. Elevated expression of alpha-B crystallin occurs in many neurological diseases; a missense mutation cosegregated in a family with a desmin-related myopathy. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]

Immunogen

A synthetic peptide of human Alpha B Crystallin

Gene ID

1410

Swiss Prot

P02511

Synonyms

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

Reactivity

Human,Rat

Application

WB, IHC-P, ICC/IF, IP

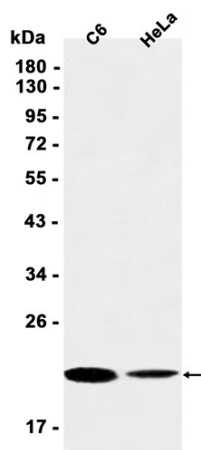
Recommended dilution

WB: 1:1000

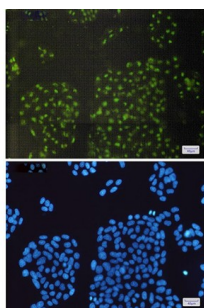
IHC-P: 1:100-1:200

ICC/IF: 1:100-1:200

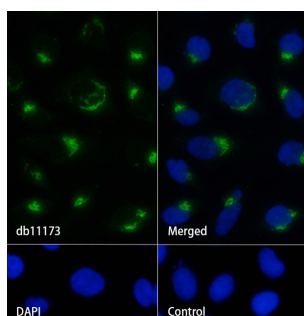
	IP: 1:100-1:200
Calculated MW	20 kDa
Observed MW	22 kDa
Host species	Rabbit
Clonality	Monoclonal
Clonality No.	DGR12950
Isotype	IgG
Purity	Affinity Purification
Conjugation	Un-conjugated
Storage Stability	Store at -20°C. Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% BSA. Stable for 12 months from date of receipt.



Western blot analysis of extracts from C6, HeLa cells using db11173 at 1:1000.



Immunofluorescent analysis of HeLa cells using db11173 antibody (green), and DAPI (blue).



Immunofluorescence analysis of HeLa cells labelling alpha B Crystallin with db11173.

The cells were fixed with cold 100% methanol (10min, 4°C) and blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween 20 for 1h. The cells were then incubate with db11173 (1:100) at room temperature for 1h, followed by a further incubation at room temperature for 45min with Goat Anti Rabbit IgG (H+L)-AF488 (db10005, shown in green). Nuclear DNA was labeled in blue with DAPI.

Control: Secondary antibody only.