

## Crystallin Alpha B Antibody

Mouse Monoclonal Antibody [Clone CRYAB/4659]

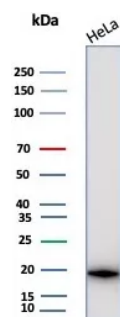
Catalog No	Format	Size
1410-MSM9-P0	Purified Ab with BSA and Azide	200ug/ml
1410-MSM9-P1	Purified Ab with BSA and Azide	200ug/ml
1410-MSM9-P1ABX	Purified Ab WITHOUT BSA and Azide	1.0mg/ml

Applications	Tested Dillution
Immunohistochemistry (IHC)	1-2ug/ml
Western Blot (WB)	2-4ug/ml

Product Details	
Clone	CRYAB/4659
Gene Name	CRYAB
Immunogen	Recombinant human full-length CRYAB protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2 / Kappa
Mol. Weight of Antigen	Predicted: 20kDa; Observed: 22-30kDa
Cellular Localization	Cytoplasm, translocates to nucleus during heat shock and resides in nuclear splicing speckles.
Species Reactivity	Human
Positive Control	Huma heart kidney or brain.

\*Optimal dilution for a specific application should be determined.

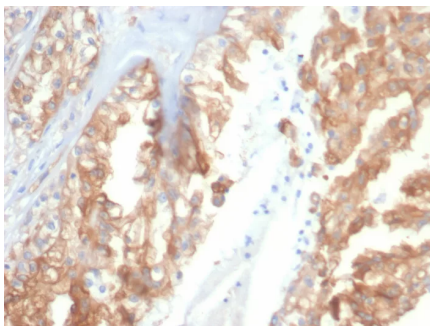
### Product Images for Crystallin Alpha B Antibody



Western blot analysis of HeLa cell lysate using Crystallin Alpha B Mouse Monoclonal Antibody (CRYAB/4659).



Analysis of Protein Array containing more than 19,000 full-length human proteins using Crystallin Alpha B Mouse Monoclonal Antibody (CRYAB/4659). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Formalin-fixed, paraffin-embedded human renal cell cancer stained with Crystallin Alpha B Mouse Monoclonal Antibody (CRYAB/4659). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.

### Specificity & Comments

Crystallins are the major proteins of the vertebrate eye lens, where they maintain the transparency and refractive index of the lens. Crystallins are divided into  $\alpha$ ,  $\beta$  and  $\gamma$  families, and the  $\alpha$ - and  $\beta$ -crystallins also compose a superfamily. Crystallins usually contain seven distinct protein regions, including four homologous motifs, a connecting peptide, and N- and C-terminal extensions.  $\gamma$ -crystallins consist of three gene products,  $\gamma$ A-,  $\gamma$ B- and  $\gamma$ C-crystallin, which are members of the small heat shock protein family (HSP 20).  $\gamma$ -crystallins act as molecular chaperones by holding denatured proteins in large soluble aggregates. However, unlike other molecular chaperones,  $\gamma$ -crystallins do not renature these proteins. Expression of  $\gamma$ A-crystallin is restricted to the lens and defects of this gene cause the development of autosomal dominant congenital cataracts (ADCC). The human  $\gamma$ B-crystallin gene product is expressed in many tissues, including lens, heart and skeletal muscle. Elevated expression of  $\gamma$ B-crystallin is associated with many neurological diseases, and a missense mutation in this gene has co-segregated in a family with a Desmin-related myopathy.

### Research Areas

Cardiovascular

### Known Applications & Suggested Dilutions

Western Blot (1-2ug/ml) | Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT), (Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes), Optimal dilution for a specific application should be determined.

### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.

There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

### Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.