

CRYM Antibody (clone 6B3) Mouse Monoclonal Antibody Catalog # ALS13294

Specification

CRYM Antibody (clone 6B3) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Dilution WB, IHC-P, E <u>Q14894</u> Human Mouse Monoclonal 34kDa KDa WB~~1:1000 IHC-P~~N/A E~~N/A

CRYM Antibody (clone 6B3) - Additional Information

Gene ID 1428

Other Names Ketimine reductase mu-crystallin, 1.5.1.25, NADP-regulated thyroid-hormone-binding protein, CRYM, THBP

Reconstitution & Storage Store at -20°C. Aliquot to avoid freeze/thaw cycles.

Precautions CRYM Antibody (clone 6B3) is for research use only and not for use in diagnostic or therapeutic procedures.

CRYM Antibody (clone 6B3) - Protein Information

Name CRYM (HGNC:2418)

Function

Catalyzes the NAD(P)H-dependent reduction of imine double bonds of a number of cyclic ketimine substrates, including sulfur- containing cyclic ketimines (PubMed:21332720, PubMed:25931162). Under physiological conditions, it efficiently catalyzes delta(1)- piperideine-2-carboxylate (P2C) and delta(1)-pyrroline-2-carboxylate (Pyr2C) reduction, suggesting a central role in lysine and glutamate metabolism (PubMed:25931162). Additional substrates are delta(2)- thiazoline-2-carboxylate (T2C), 3,4-dehydrothiomorpholine-3-carboxylate (AECK), and (R)-lanthionine ketimine (LK) that is reduced at very low rate compared to other substrates (PubMed:<a href="http://www.uniprot.org/citations/25931162). Also

href="http://www.uniprot.org/citations/25931162" target="_blank">25931162). Also catalyzes the NAD(P)H-dependent reduction of (S)-cystathionine ketimine (CysK) (By similarity).



Cellular Location Cytoplasm.

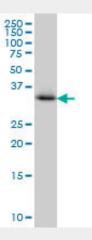
Tissue Location Expressed in neural tissues, muscle and kidney (PubMed:1384048). Expressed in the inner ear (PubMed:12471561)

CRYM Antibody (clone 6B3) - Protocols

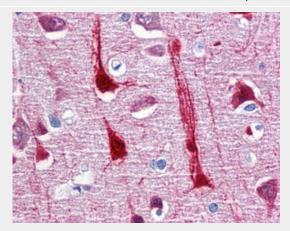
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CRYM Antibody (clone 6B3) - Images

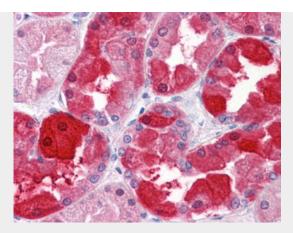


CRYM monoclonal antibody clone 6B3 Western blot of CRYM expression in Jurkat.



Anti-CRYM antibody IHC of human brain, cortex.





Anti-CRYM antibody IHC of human kidney.

CRYM Antibody (clone 6B3) - Background

Specifically catalyzes the reduction of imine bonds in brain substrates that may include cystathionine ketimine (CysK) and lanthionine ketimine (LK). Binds thyroid hormone which is a strong reversible inhibitor. Presumably involved in the regulation of the free intracellular concentration of triiodothyronine and access to its nuclear receptors.

CRYM Antibody (clone 6B3) - References

Segovia L., et al.Mol. Vis. 3:9-9(1997). Vie M.-P., et al.Mol. Endocrinol. 11:1728-1736(1997). Sperbeck S.J., et al.Submitted (DEC-1997) to the EMBL/GenBank/DDBJ databases. Loftus B.J., et al.Genomics 60:295-308(1999). Ota T., et al.Nat. Genet. 36:40-45(2004).