10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CRYM Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19781c

Specification

CRYM Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	Q14894
Other Accession	NP_001879.1
Reactivity	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**33776**
Antigen Region	**154-183**

CRYM Antibody (Center) - Additional Information

Gene ID 1428

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

Target/Specificity
This CRYM antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 154-183 amino acids from the Central region of human CRYM.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

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

CRYM Antibody (Center) - 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:25931162). Also catalyzes the NAD(P)H-dependent reduction of (S)-cystathionine ketimine (CysK) (By similarity).

Cellular Location
Cytoplasm.

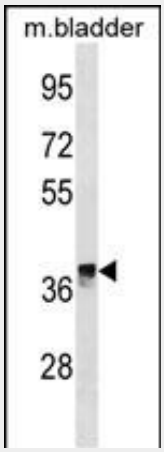
Tissue Location
Expressed in neural tissues, muscle and kidney (PubMed:1384048). Expressed in the inner ear (PubMed:12471561)

CRYM Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CRYM Antibody (Center) - Images



CRYM Antibody (Center) (Cat. #AP19781c) western blot analysis in mouse bladder tissue lysates (35ug/lane).This demonstrates the CRYM antibody detected the CRYM protein (arrow).

CRYM Antibody (Center) - Background

Crystallins are separated into two classes: taxon-specific and ubiquitous. The former class is also called phylogenetically-restricted crystallins. The latter class constitutes the major proteins of vertebrate eye lens and maintains

the transparency and refractive index of the lens. This gene encodes a taxon-specific crystallin protein that binds NADPH and has sequence similarity to bacterial ornithine cyclodeaminases. The encoded protein does not perform a structural role in lens tissue, and instead it binds thyroid hormone for possible regulatory or developmental roles. Mutations in this gene have been associated with autosomal dominant non-syndromic deafness. Multiple alternatively spliced transcript variants have been found for this gene.

CRYM Antibody (Center) - References

Martins-de-Souza, D., et al. J Psychiatr Res (2010) In press :
Al-Kafaji, G., et al. Biochem. Biophys. Res. Commun. 391(4):1585-1591(2010)
Malinowska, K., et al. Prostate 69(10):1109-1118(2009)
Martins-de-Souza, D., et al. J Psychiatr Res 43(11):978-986(2009)
Martins-de-Souza, D., et al. Eur Arch Psychiatry Clin Neurosci 259(3):151-163(2009)