

DNAxPAb

Hard-to-Find
Antibody

CRYAA DNAxPab

Catalog # H00001409-W01P

Size 200 ug

Specification

Product Description	Rabbit polyclonal antibody raised against a full-length human CRYAA DNA using DNAx™ Immune technology.
Technology	DNAx™ Immune
Immunogen	Full-length human DNA
Sequence	MDVTIQHPWFKRTLGPFYPSRLFDQFFGEGLFEDLLPFLSSTISPYRQSLFRTVLDSGISEVRSD RDKFVIFLDVKHFSPEDLTVKVQDDFVEIHGKHNERQDDHGYISREFHRRYRLPSNVDQSALSCS LSADGMLTFCGPKIQTGLDATHAERAIPVSREEKPTSAPSS
Host	Rabbit
Reactivity	Human
Purification	Protein A
Quality Control Testing	Antibody reactive against mammalian transfected lysate.
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Transfected lysate)

[Protocol Download](#)

- Immunofluorescence (Transfected cell)
- Flow Cytometry (Transfected cell)

Gene Info — CRYAA

Entrez GeneID [1409](#)

GeneBank Accession# [NM_000394.2](#)

Protein Accession# [NP_000385.1](#)

Gene Name CRYAA

Gene Alias CRYA1, HSPB4

Gene Description crystallin, alpha A

Omim ID [123580](#)

Gene Ontology [Hyperlink](#)

Gene Summary

Crystallins are separated into two classes: taxon-specific, or enzyme, and ubiquitous. The latter class constitutes the major proteins of vertebrate eye lens and maintains the transparency and refractive index of the lens. Since lens central fiber cells lose their nuclei during development, these crystallins are made and then retained throughout life, making them extremely stable proteins. Mammalian lens crystallins are divided into alpha, beta, and gamma families; beta and gamma crystallins are also considered as a superfamily. Alpha and beta families are further divided into acidic and basic groups. Seven protein regions exist in crystallins: four homologous motifs, a connecting peptide, and N- and C-terminal extensions. 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 (sHSP also known as the 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. 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. Defects in this gene cause autosomal dominant congenital cataract (ADCC). [provided by RefSeq]

Other Designations crystallin, alpha-1|human alphaA-crystallin (CRYA1)

Disease

- [Cataract](#)
- [Genetic Predisposition to Disease](#)