

Alpha-crystallin A chain (Cryaa) Recombinant Protein | Cryaa recombinant protein

Recombinant Rat Alpha-crystallin A chain (Cryaa)

CATALOG # AAA115513	HOST E Coli or Yeast or Baculovirus or Mammalian Cell
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PRODUCT SYNONYMS

Alpha-crystallin A chain (Cryaa); Recombinant Rat Alpha-crystallin A chain (Cryaa); Cryaa recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Sequence Positions	1-196aa; Full Length Protein
Sequence	MDVTIQHPWF KRALGPFYPS RLFDQFFGEG LFEYDLLPFL SSTISPPYRQ SLFRTVLDSG ISELMTHMWF VMHQPHAGNP KNNPGKVRSD RDKFVIFLDV KHFSPEDLTV KVLEDFVEIH GKHNERQDDH GYISREFHRR YRLPSNVDQS ALSCSLSADG MLTFSGPKVQ SGLDAGHSER AIPVSREEKP SSAPSS
Species	Rat
Preparation and Storage	Store at -20 degrees C. For long-term storage, store at -20 degrees C or -80 degrees C. Store working aliquots at 4 degrees C for up to one week. Repeated freezing and thawing is not recommended.

ADDITIONAL INFORMATION

Related Product Information for Cryaa recombinant protein	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).
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NCBI AND UNIPROT INFORMATION

NCBI GI #	576583466
NCBI GeneID	24273
NCBI Accession #	NP_001276666.1
NCBI GenBank Nucleotide #	NM_001289737.1

UniProt Accession #	P24623; P02490; P02496; P82532; Q61444
Molecular Weight	19,792 Da
NCBI Official Full Name	alpha-crystallin A chain isoform 2
NCBI Official Synonym Full Names	crystallin, alpha A
NCBI Official Symbol	Cryaa
NCBI Official Synonym Symbols	Crya1; Acry-1
NCBI Protein Information	alpha-crystallin A chain
UniProt Protein Name	Alpha-crystallin A chain
UniProt Gene Name	Cryaa
UniProt Synonym Gene Names	Crya1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/cryaa-recombinant-protein-e-coli-or-yeast-or-baculovirus-or-mammalian-cell/115513>