

Product Data Sheet

□ Cat # RP-611

Recombinant Human Crystallin Alpha A

Size: □ 20 ug

Synonyms:

CRYA1, HSPB4, CRYA1.

Introduction:

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). They act as molecular chaperones and hold them in large soluble aggregates. 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 α -crystallins are an autokinase activity and participation in the intracellular architecture. The expression of alpha-A is preferentially restricted to the lens cell.

Source:

Recombinant CRYAA produced in E-Coli is a single, non-glycosylated polypeptide chain containing 173 amino acids and having a molecular mass of 19,909 Dalton. CRYAA is purified by proprietary chromatographic techniques

Physical Appearance:

Sterile filtered colorless solution.

Formulation:

The CRYAA protein (1mg/ml) contains 20mM Tris-HCl buffer (pH 7.5), 50mM NaCl and 1mM EDTA.

Storage and Stability:

Store at 4°C if entire vial if using within 2-4 weeks. Store at -20°C for long term. Avoid multiple freeze-thaw cycles.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). If supplied in powder then reconstitute it in 100 ul water for 1 mg/ml stock and store in liquid at 4oC for ~1 week or aliquots in suitable size and store at -20oC for long term storage

Purity:

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Sequence:

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MDVTIQHPWF KRTLGPFPYPS RLFDQFFGEG LFEYDLLPFL  
SSTISPYRQ SLFRTVLDSGISEVRSRDK FVIFLDVKHF  
SPEDLTVKVQ DDFVEIHGKH NERQDDHGYI  
SREFHRRYRLPSNVDQSALS CSLSADGMLT FCGPKIQTGL  
DATAERAIP VSREEKPTSA PSS
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This item is for LABORATORY ESEARCH USE ONLY

Related Items:

Catalog#	ProdDescription
RP-611	Recombinant Human Crystallin Alpha A
RP-612	Recombinant Human Crystallin Alpha B
SP-55342-1	Crystalline [H-Trp-Gly-OH; MW: 261.2]
MA-20182	Mouse Monoclonal Anti-Human Crystallin, alpha B (CRYAB)

RP-611

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