

Recombinant human Crystallin alpha A/CRYAA protein

Catalog Number: CRA3001

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-173aa

UniProt No.

P02489

NCBI Accession No.

NP_000385.1

Alternative Names

Acry-1, Alpha crystallin A chain, CRYA1, CRYAA, Crystallin alpha 1, Crystallin alpha A, Heat shock protein beta 4, HSPB 4, HspB4, Zonular Central Nuclear Cataract

PRODUCT SPECIFICATION

Molecular Weight

19.9 kDa (173aa)

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 7.5) containing 50mM NaCl, 1mM EDTA

Purity

> 90% by SDS-PAGE

Tag

Non-Tagged

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

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 function of alpha-crystallins are an autokinase activity and participation in the

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intracellular architecture. The expression of alpha-A is preferentially restricted to the lens cell.

Amino acid Sequence

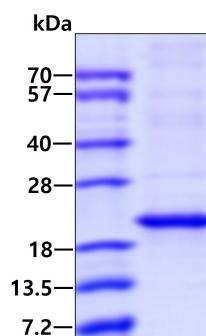
MDVTIQHPWF KRTLGPFPYS RLFDQFFGEG LFEYDLLPFL SSTISPPYRQ SLFRTVLDSG ISEVRSDRDK FVIFLDVKHF
SPEDLTVKVQ DDFVEIHGKH NERQDDHGYI SREFHRRYRL PSNVDQSALS CSLSADGMLT FCGPKIQTGL DATHAERAIP
VSREEKPTSA PSS

General References

Hasan, A., et al.(2002) Biochemistry 41(52) 15876-15882
Bera,S., et al(2002) Biochemistry 41(41) 12421-12426
Reddy, G.B., et al(2002) FEBS lett. 522(1-3) 59-64
Andley, u.P., et al(2002) J.Biol.Chem.277(12) 10178-10186

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.