abcam

Product datasheet

Recombinant human alpha A Crystallin/CRYAA protein ab48778

2 References 2 Images

Description

Product name	Recombinant human alpha A Crystallin/CRYAA protein
Purity	> 90 % SDS-PAGE.
Expression system	Escherichia coli
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MDVTIQHPWF KRTLGPFYPS RLFDQFFGEG LFEYDLLPFL SSTISPYYRQ SLFRTVLDSG ISEVRSDRDK FVIFLDVKHF SPEDLTVKVQ DDFVEIHGKH NERQDDHGYI SREFHRRYRL PSNVDQSALS CSLSADGMLT FCGPKIQTGL DATHAERAIP VSREEKPTSA PSS
Amino acids	1 to 173

Specifications

Our **Abpromise guarantee** covers the use of **ab48778** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies SDS-PAGE Western blot
Form	Liquid
Additional notes	This product was previously labelled as alpha A Crystallin

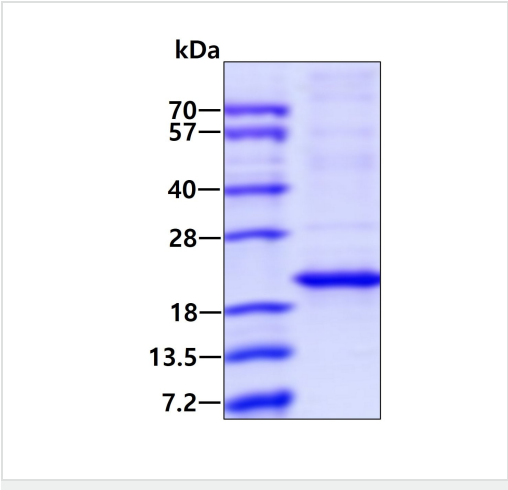
Preparation and Storage

Stability and Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles. pH: 7.50 Constituents: 0.316% Tris HCl, 0.0292% EDTA, 0.29% Sodium chloride This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Function	May contribute to the transparency and refractive index of the lens.
Involvement in disease	Defects in CRYAA are a cause of cataract autosomal dominant (ADC) [MIM:604219]. Cataract is an opacification of the crystalline lens of the eye that frequently results in visual impairment or blindness. Opacities vary in morphology, are often confined to a portion of the lens, and may be static or progressive. In general, the more posteriorly located and dense an opacity, the greater the impact on visual function. Cataract is the most common treatable cause of visual disability in childhood.
Sequence similarities	Belongs to the small heat shock protein (HSP20) family.
Post-translational modifications	O-glycosylated; contains N-acetylglucosamine side chains. Deamidation of Asn-101 in lens occurs mostly during the first 30 years of age, followed by a small additional amount of deamidation (approximately 5%) during the next approximately 38 years, resulting in a maximum of approximately 50% deamidation during the lifetime of the individual. Phosphorylation on Ser-122 seems to be developmentally regulated. Absent in the first months of life, it appears during the first 12 years of human lifetime. The relative amount of phosphorylated form versus unphosphorylated form does not change over the lifetime of the individual.
Cellular localization	Cytoplasm. Nucleus. Translocates to the nucleus during heat shock and resides in sub-nuclear structures known as SC35 speckles or nuclear splicing speckles.

Images



SDS-PAGE - Recombinant human alpha A Crystallin/CRYAA protein (ab48778)

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

Western blot - Recombinant human alpha A Crystallin/CRYAA protein (ab48778)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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