

## Product datasheet

# Recombinant Human alpha A Crystallin protein ab113189

[2 Images](#)

### Overview

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<b>Product name</b>	Recombinant Human alpha A Crystallin protein
<b>Protein length</b>	Full length protein

### Description

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<b>Nature</b>	Recombinant
<b>Source</b>	Escherichia coli

### Amino Acid Sequence

<b>Accession</b>	<a href="#">P02489</a>
<b>Species</b>	Human
<b>Molecular weight</b>	20 kDa including tags
<b>Amino acids</b>	1 to 173
<b>Tags</b>	His tag N-Terminus

### Specifications

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Our [Abpromise guarantee](#) covers the use of **ab113189** in the following tested applications.

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

<b>Applications</b>	Western blot SDS-PAGE
<b>Purity</b>	> 95 % SDS-PAGE. <a href="#">ab11318</a> is purified by multi-step chromatography.
<b>Form</b>	Liquid

### Preparation and Storage

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<b>Stability and Storage</b>	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 7.50 Constituents: 0.61% Tris, 0.08% DTT, 0.29% Sodium chloride
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## 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.

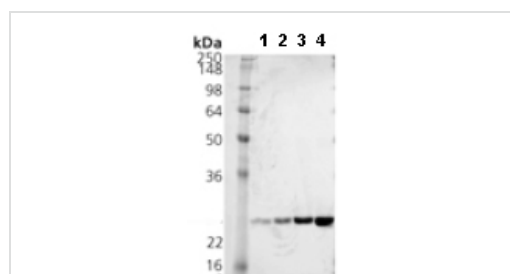
Deamidation of Asn-101 in lens occurs mostly during the first 30 years of age, followed by a small additional amount of deamidation (approximately 5%) during the next approximately 38 years, resulting in a maximum of approximately 50% deamidation during the lifetime of the individual.

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 - alpha A Crystallin protein (ab113189)

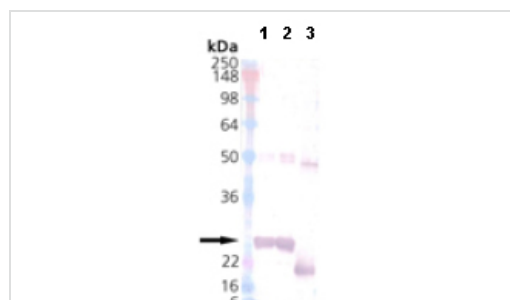
SDS-PAGE showing ab113189

Lane 1: 0.5µg protein

Lane 2: 1.0µg protein

Lane 3: 2.0µg protein

Lane 4: 4.0µg protein



Western blot - alpha A Crystallin protein (ab113189)

**All lanes :** anti-alpha A Crystallin pAb

**Lane 1 :** Recombinant Human alpha A Crystallin protein (ab113189) at 0.1 µg

**Lane 2 :** Recombinant Human alpha A Crystallin protein (ab113189) at 0.2 µg

**Lane 3 :** Native Cow alpha A Crystallin protein

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