



Recombinant Human Beta-crystallin B1 (CRYBB1)

Product Code	CSB-EP006012HU
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P53674
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	≥85% (SDS-PAGE)
Sequence	SQAAKASAS ATVAVNPGPD TKGKGAPPAG TSPSPGTTLA PTTVPITSAK AAELPPGNYR LVVFELENFQ GRRAEFSGEC SNLADRGFDR VRSIIVSAGP WVAFEQSNFR GEMFILEKGE YPRWNTWSSS YRSDRLMSFR PIKMDAQEHK ISLFEGANFK GNTIEIQGDD APSLWVYGFS DRVGSVKVSS GTWVG YQYPG YRGYQYLLEP GDFRHWNEWG AFQPQMQLR RLRDKQWHLE GSFPVLATEP PK
Source	E.coli
Target Names	CRYBB1
Protein Names	Recommended name: Beta-crystallin B1 Alternative name(s): Beta-B1 crystallin
Expression Region	2-252
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full Length of Mature Protein
Target Details	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. Beta-crystallins, the most heterogeneous, differ by the presence of the C-terminal extension (present in the basic group, none in the acidic group). Beta-crystallins form aggregates of different sizes and are able to self-associate to form dimers or to form heterodimers with other beta-crystallins. This gene, a beta basic group member, undergoes extensive cleavage at its N-terminal extension during lens maturation. It is also a member of a gene cluster with beta-A4, beta-B2, and beta-B3.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final



concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.