

CRYZ, 1-329aa, Human, His tag, E.coli

Cat.NO.: TP01732

3th Edition

Synonyms:Quinone oxidoreductase isoform a, Crystallin, zeta (quinone reductase)

Description: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. The former class is also called phylogenetically-restricted crystallins. This gene encodes a taxon-specific crystallin protein which has NADPH-dependent quinone reductase activity distinct from other known quinone reductases. It lacks alcohol dehydrogenase activity although by similarity it is considered a member of the zinc-containing alcohol dehydrogenase family. Unlike other mammalian species, in humans, lens expression is low. Recombinant human CRYZ protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

Form:Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 20% glycerol, 1mM DTT

Molecular Weight:37.6 kDa (352aa) confirmed by MALDI-TOF

Sequences:

MGSSHHHHHSSGLVPRGSHMGSMATGQKLMRAVRVFEFGGPEVLKLRSDIAVPIPKDHQVLIKVHACGVNPVET
YIRSGTYSRKPLLPYTPGSDVAGVIEAVGDNASAFKKGDRVFTSSTISGGYAEYALAADHTVYKLPEKLDKQGA
GIPYFTAYRALIHSACVKAGESVLVHGASGGVGLAACQIARAYGLKILGTAGTEEGQKIVLQNGAHEVFNHREVNYID
KIKKYVGEKGDIIIEMLANVNLKDL SLLSHGGRVIVVGSRTIEINPRDTMAKESSIIGVTLFSSTKEEFQQYAAALQA
GMEIGWLKPVIGSQYPLEKVAEAHENIIHGSGATGKMILL

Purity:> 95% by HPLC

Concentration:0.5 mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.