

California Bioscience

Product Datasheet

| Product Name | Recoverin Human Recombinant |
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| Cata No | CB501061 |
| Source | Escherichia Coli. |
| Synonyms | RCV1, Cancer-associated retinopathy protein, Protein CAR, RCVRN, Recoverin. |

Description

Recoverin is a member of the recoverin family of neuronal calcium sensors. Recoverin is a heterogeneously acylated calcium-binding and intracellular signal transduction 23kDa protein in the photoreceptor cells of retina. Recoverin contains four EF-hands, of which two bind Ca. Ca-induced extrusion of the acyl group from a hydrophobic cleft in the protein drives the translocation of recoverin from solution to the disc membrane. Recoverin may prolong the termination of the phototransduction cascade in the retina by blocking the phosphorylation of photo-activated rhodopsin. Recoverin plays a key role in the inhibition of rhodopsin kinase, a molecule that regulates the phosphorylation of rhodopsin. This in due course controls the ability of the eye to adapt to, and recover from, exposure to the presence of light. Recoverin is a detectable serologic protein that is expressed in patients with cancer-associated retinopathy, a paraneoplastic syndrome. Recoverin Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 200 amino acids & having a molecular mass of 23kDa.

Physical Appearance

Sterile filtered colorless solution.

Purity

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Formulation

The protein contains 20 mM Tris pH 8.0, 1 mM EDTA, 2mM MgCl₂ and 10% Glycerol.

Stability

Store at 4° if entire vial will be used within 2-4 weeks.

Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Avoid multiple freeze-thaw cycles.

Sequence

MGNSKSGALS KEILEELQLN TKFSEEELCS WYQSFLKDCP TGRITQQQFQ SIYAKFFPDT DPKAYAQHVF RSFDSNLDGT LDFKEYVIAL HMTTAGKTNQ KLEWAFSLYD VDGNGTISKNEVLEIVMAIF KMITPEDVKL LPDDENTPEK RAEKIWKYFG KNDDDKLTEK EFIEGTLANK EILRLIQFEP QKVKEKMKNA.