Human XRP2 / RP2 Protein (GST Tag)

Catalog Number: **11092-H09B**

General Information

Gene Name Synonym:

DELXp11.3; KIAA0215; NM23-H10; NME10; RP2; TBCCD2; XRP2

Protein Construction:

A DNA sequence encoding the human XRP2 (NP_008846.2) (Met 1-Thr 350) was fused with the GST tag at the N-terminus.

Source: Human

Expression Host: Baculovirus-Insect Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Met

Molecular Mass:

The recombinant human XRP2/GST chimera consists of 575 amino acids and predicts a molecular mass of 66 kDa as estimated in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 50mM Tris, 100mM NaCl, 1mM GSH 0.5mM EDTA, 0.5mM PMSF pH 8.0

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

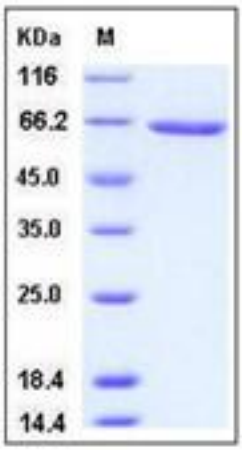
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

XRP2, also known as Protein XRP2 and RP2, is a member of theTBCC (tubulin cofactor C) family and contains oneC-CAP/cofactor C-like domain. This protein is encoded by theRP2gene in humans. XRP2 stimulates the GTPase activity of tubulin, but does not enhance tubulin heterodimerization. XRP2 acts as guanine nucleotide dissociation inhibitor for ARL3. Defects in RP2 gene are the cause of retinitis pigmentosa type 2 (RP2), also known as X-linked retinitis pigmentosa 2 (XLRP-2). It leads to degeneration of retinal photoreceptor cells. Patients typically have night vision blindness and loss of midperipheral visual field. As their condition progresses, they lose their far peripheral visual field and eventually central vision as well.

References

1.Schwahn U., *et al.*,(1998), Positional cloning of the gene for X-linked retinitis pigmentosa 2. Nat. Genet. 19:327-332. 2.Ross M.T., *et al.*, (2005), The DNA sequence of the human X chromosome.Nature 434:325-337. 3.Vaca Jacome A.S., *et al.*,(2015), N-terminome analysis of the human mitochondrial proteome. Proteomics 15:2519-2524.