RP2 Protein, Human (sf9, GST)

Cat. No.:	HY-P74593
Synonyms:	Protein XRP2; RP2
Species:	Human
Source:	Sf9 insect cells
Accession:	O75695 (M1-T350)
Gene ID:	6102
Molecular Weight:	Approximately 66 kDa

PROPERTIES

Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of 50 mM Tris, 100 mM NaCl, 1 mM GSH 0.5 mM EDTA, 0.5 mM PMSF pH 8.0. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	RP2 protein serves as a GTPase-activating protein (GAP), playing a crucial role in the regulation of intracellular trafficking between the Golgi apparatus and the ciliary membrane. It is involved in the precise localization of proteins, such as NPHP3, to the cilium membrane by catalyzing the hydrolysis of GTP ARL3. This process leads to the subsequent release of UNC119 (or UNC119B). Furthermore, RP2 acts as a GTPase-activating protein for tubulin in conjunction with the tubulin-specific chaperone C, although it does not enhance tubulin heterodimerization. Additionally, RP2 acts as a guanine nucleotide dissociation inhibitor for ADP-ribosylation factor-like proteins. It forms a complex with ARL3 and UNC119 (or UNC119B), where RP2 induces the hydrolysis of GTP ARL3 within the complex, resulting in the liberation of UNC119 (or UNC119B). The interaction with ARL3 is direct and is stimulated by the activated GTP-bound form of ARL3.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA