

Recombinant Human UBE2G2 Protein (GST Tag)

Catalog No. PKSH033184

Note: Centrifuge before opening to ensure complete recovery of vial contents.

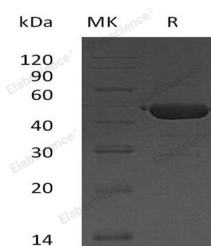
Description

Synonyms	Ubiquitin-Conjugating Enzyme E2 G2; Ubiquitin Carrier Protein G2; Ubiquitin-Protein Ligase G2; UBE2G2
Species	Human
Expression Host	E.coli
Sequence	Met 1-Leu165
Accession	P60604
Calculated Molecular Weight	45.0 kDa
Observed molecular weight	43 kDa
Tag	N-GST
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.
Formulation	Supplied as a 0.2 µm filtered solution of 50mM HEPES, 150mM NaCl, 2mM DTT, 10% Glycerol, pH 7.5.
Reconstitution	Not Applicable

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Ubiquitin-Conjugating Enzyme E2 G2 (UBE2G2) is an important cellular mechanism for targeting abnormal or short-lived proteins for degradation, which belong to the ubiquitin-conjugating enzyme family. It shares 60% and 100% sequence identity with *S.cerevisiae* Ubc7 and mouse respectively. The UBE2G2 enzyme and the GP78 E3 ligase are active components of endoplasmic reticulum-associated degradation pathway which is essential for the degradation of

For Research Use Only

misfolded ER proteins. The mechanism of K48-linked poly-ubiquitination by UBE2G2/GP78 appears to involve the transfer of preassembled Ub chains from UBE2G2 to lysine residues in a substrate. The E2 and E3 enzymes form a large hetero-oligomer which brings multiple UBE2G2 molecules into close proximity which allows for Ub transfer between neighboring E2s.