

Product Data:**Product SKU:** RPES2023**Size:** 10µg**Species:** Human**Expression host:** E. coli**Uniprot:** P60604**Protein Information:****Molecular Mass:** 45.0 kDa**AP Molecular Mass:** 43 kDa**Tag:** N-GST**Bio-activity:****Purity:** > 95 % as determined by reducing SDS-PAGE.**Endotoxin:** < 1.0 EU per µg 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:** Please refer to the printed manual for detailed information.**Application:****Synonyms:** Ubiquitin-Conjugating Enzyme E2 G2; Ubiquitin Carrier Protein G2; Ubiquitin-Protein Ligase G2; UBE2G2

Immunogen Information:

Sequence: Met 1-Leu165

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 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.