UBE2G1 (UBC7), His-Tag Recombinant

Catalog: 79372

Lot: 231025

Product Information

Description:	Recombinant full length human UBE2G1 (ubiquitin-conjugation enzyme E2 G1). This construct contains an N-terminal His-tag. The recombinant protein was affinity purified and is active.
Species:	Human
Construct:	UBE2G1 (His-Full length)
Concentration:	0.05 mg/ml
Expression System:	*E. coli*
Purity:	90%
Format:	Aqueous buffer solution
Formulated In:	50 mM sodium phosphate, pH 7.0, 300 mM NaCl, 150 mM imidazole, 0.1 mM PMSF, 0.25 mM DTT, 25% glycerol
MW:	21 kDa
Genbank Accession:	NM_003342
Stability:	At least 6 months at -80°C. Avoid freeze/thaw cycles.
Storage:	-80°C
Instructions for Use:	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.
Specific Activity:	11 pmol/min/µg
Assay Conditions:	UBE2G1 activity was measured by using the wild type ubiquitin protein diluted in Ubiquitination Buffer [(40 mM Tris (pH 7.5), 20 mM $MgCl_2$, 0.1 mg/ml BSA and 0.5 mM DTT] to a working concentration of 170 ng/µl (20 µM), in AMP-Glo™ based assay (Promega #V5011). Reaction was initiated by mixing 5 µl of a solution of 2x the final concentrations of UBE2G1 with 5 µl of a 2x Reaction Cocktail (1 µl of stock solution of ubiquitin, 15 ng/µl UBA1 + 40 ng/µl BIRC3 + 50 µM ATP). The reaction was initiated by mixing 5 µl of 2x UBE2G1 protein dilutions with 5 µl of 2x Reaction Cocktail for 60 minutes at 37°C. After the plate was equilibrated to Room Temperature (RT), 10 µl of AMP-Glo™ Reagent I was added, mixed for 1-2 minutes and incubated at RT for 60 minutes. AMP-Glo™ Reagent II was diluted 100-fold with Kinase-Glo™ One Solution, and 20 µl were added to each well, mixed for 1-2 minutes and incubated at RT for 30 minutes. The plate was read in a GloMax plate reader (Promega # E7031). The Enzyme Specific Activity was calculated as follows: [(AMP concentration in µM) * (Reaction Volume in µl)] / Reaction time in min) *(Enzyme amount in mg)] x 10^{-3}. A blank can be determined from a “no substrate” sample by replacing the enzyme solution with an equal volume of Ubiquitination Buffer.
Applications:	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

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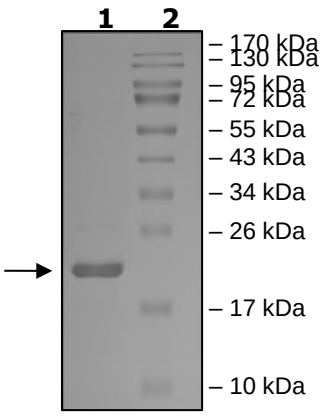
Quality Control Data

4-20% SDS-Page Coomassie Staining



Specific Activity