ROS1 (G2032R), GST-Tag Recombinant

Catalog: 101640
Lot: 230615

Product Information

Description:	Recombinant human ROS1 (G2032R) (ROS proto-oncogene 1, receptor tyrosine kinase), encompassing amino acids 1881-end. This construct contains an N-terminal GST-tag and was affinity purified.
Species:	Human
Construct:	ROS1 (G2032R) (GST-1881-end)
Mutation:	G2032R
Concentration:	0.05 mg/ml
Expression System:	Sf9
Purity:	90%
Format:	Aqueous buffer solution.
Formulated In:	50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, 25% glycerol
MW:	82 kDa
Genbank Accession:	NM_002944
Stability:	At least 6 months at -80°C.
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:	141 pmol/min/µg
Assay Conditions:	ROS1 activity was measured by using a IGF1Rtide synthetic peptide (KKKSPGEYVNIEFG), diluted in 20 mM Tris-HCl, pH 7.5 to a final concentration of 1 mg/ml, in the ADP Glo™ assay (Promega #V9101). Reaction was initiated by mixing increasing amounts of the ROS1 with 25 µM ATP in 40 mM Tris-HCl, pH 7.4, 25 mM $MgCl_2$, 0.1 mg/ml BSA prepared with 50 µM DTT, and substrate at a final concentration of 200 µg/ml final concentration. After a 40-minute incubation at Room Temperature, the reaction was terminated by addition of ADP-Glo™ Reagent, followed by a subsequent 40-minute incubation at room temperature. Kinase Detection Reagent was added, and the reaction was incubated for another 30 minutes at ambient temperature. Detection of luminescence was measured using the Luminescence Module Protocol on GloMax®-Multi Microplate Multimode Reader. The corrected activity (RLU) was calculated by removing the blank value for each sample. The Kinase Specific Activity was calculated as follows: RLU / [(specific activity of ADP in RLU/pmol)*(Reaction time in min)*(Enzyme amount in µg or mg)]. The blank was determined from a “no kinase” sample by replacing the enzyme solution with an equal volume of Kinase Dilution Buffer IX (1X).
Applications:	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

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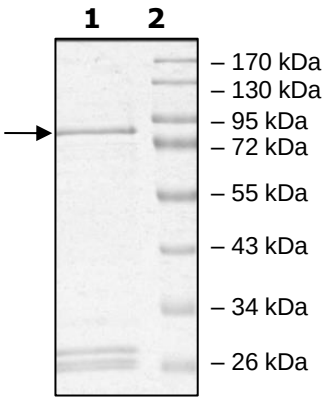
Quality Control Data

4-20% SDS-PAGE Coomassie Staining



Specific Activity