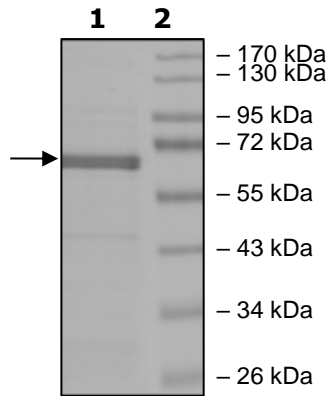


Product Information

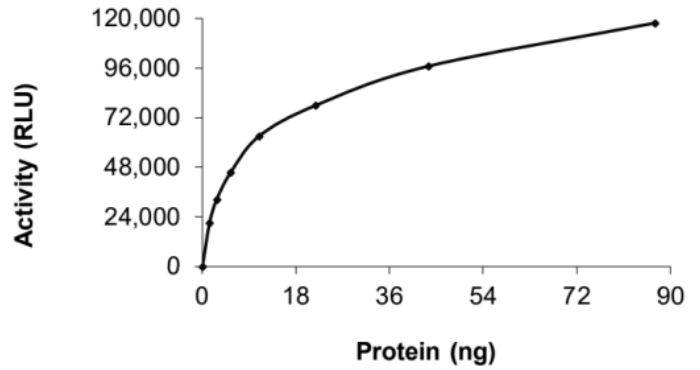
Description:	Recombinant full length human ERK2 (extracellular signal-regulated kinase 2). This construct contains an N-terminal GST-tag. The recombinant protein was affinity purified and was activated by MEK1 <i>in vitro</i> .
Species:	Human
Construct:	ERK2 (GST-1-360)
Concentration:	0.10 mg/ml
Expression System:	<i>E. coli</i>
Purity:	≥80%
Format:	Aqueous buffer solution.
Formulated In:	50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.25 mM DTT, 0.1 mM EDTA, 0.1 mM PMSF, and 25% glycerol
MW:	68 kDa
Genbank Accession:	NM_002745
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:	24 pmol/min/μg (specific activity measured using the specific activity assay described below)
Assay Conditions:	<p>Specific Activity was measured by using MBP, diluted in 100 mM MOPS, pH 6.5 to a working concentration of 0.5 mg/ml, in the ADP Glo™ Kinase Assay kit (Promega #V9101). Reaction was initiated by mixing increasing amounts of the ERK2 with 25 μM ATP in 40 mM Tris-HCl, pH 7.4, 20 mM MgCl₂, 0.1 mg/ml BSA prepared with 50 μM DTT, and substrate at a final concentration of 100 μg/ml.</p> <p>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 Specific Activity was calculated as follows: (Corrected activity, RLU) / [(Specific activity from ADP in RLU/pmol) * (Reaction time in min) *(Enzyme amount in μg or mg)]. Corrected RLU was calculated by subtracting the blank value from all the values. The blank was determined from a “no enzyme” sample by replacing the enzyme solution with an equal volume of Dilution Buffer IX (1x).</p> <p>ERK2 Activity was measured according to Chemi-Verse™ ERK2 Kinase Assay Kit (BPS Bioscience #78899) with various amounts of ERK2.</p>
Applications:	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

Quality Control Data

4-20% SDS-PAGE Coomassie Staining



Specific Activity



ERK2 Activity

