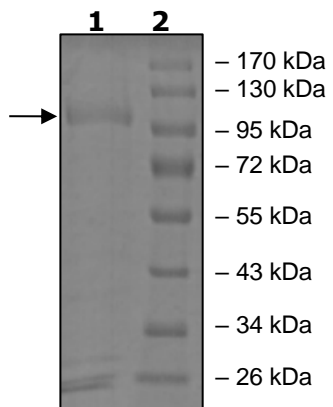


Product Information

Description:	Recombinant human full-length IRAK2 (Interleukin-1 receptor-associated kinase 2). This construct contains an N-terminal GST-tag. The recombinant protein was affinity purified and is active.
Species:	Human
Construct:	IRAK2 (GST-Full Length)
Concentration:	0.10 mg/ml
Expression System:	Sf9
Purity:	≥75%
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:	103 kDa
Genbank Accession:	NM_001570
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:	5.1 pmol/min/μg
Assay Conditions:	IRAK2 activity was measured by using a modified AKT peptide substrate (modified-CKRPRAASFAE), diluted in distilled water to a final concentration of 1 mg/ml, in a [33P]-ATP based assay. Reaction was initiated by mixing increasing amounts of the IRAK2 with 1250 pmoles of [33P]-ATP in 5 mM MOPS, pH 7.2, 2.5 mM β-glycerol-phosphate, 5 mM MgCl ₂ , 1 mM EGTA, 50 ng/μl BSA prepared with 50 μM DTT, 2 μM ATP and substrate at a final concentration of 200 μg/ml. The reaction was initiated by addition of [33P]-ATP Assay Cocktail, followed by a 15-minute incubation at 30°C. The reaction was terminated by spotting the reaction mixture on phosphocellulose P81 paper, air-dry and three 10-minute washes with 1% phosphoric acid solution. Radioactivity was measured in a scintillation counter. The corrected activity (RLU) was calculated by removing the blank value for each sample. The Kinase Specific Activity was calculated as follows: $RLU / [(specific\ activity\ of\ [33P]-ATP\ in\ cpm/pmol) * (Reaction\ time\ in\ min) * (Enzyme\ amount\ in\ \mu g\ or\ mg)] * [(Reaction\ Volume) / (Spot\ Volume)]$. The blank was determined from a “no substrate” sample by replacing the substrate solution with an equal volume of distilled water.
Applications:	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

Quality Control Data

4-20% SDS-PAGE Coomassie Staining



Specific Activity

