Recombinant VRK1 protein

Catalog No: 31200
Expressed In: Baculovirus

Quantity: 10 µg
Concentration: 0.269 µg/µl
Source: Human

Buffer Contents: 10 µg of Recombinant VRK1 protein in 50 mM Tris-HCl, pH 8.0; 100 mM NaCl, 5 mM DTT, 15 mM reduced glutathione, 20% glycerol. Protein is supplied at 0.269 µg/µl.

Background: VRK1 (Vaccinia Related Kinase 1) is a serine/threonine kinase involved in Golgi disassembly during the cell cycle: following phosphorylation by PLK3 during mitosis, required to induce Golgi fragmentation. Acts by mediating phosphorylation of downstream target protein. Phosphorylates Thr-18 of p53/TP53 and may thereby prevent the interaction between p53/TP53 and MDM2. Phosphorylates casein and histone H3. Phosphorylates BANF1: disrupts its ability to bind DNA, reduces its binding to LEM domain-containing proteins and causes its relocalization from the nucleus to the cytoplasm. Phosphorylates ATF2 which activates its transcriptional activity.

Protein Details: Recombinant human VRK1 protein was produced using baculovirus infected Sf9 cells. The protein was made against amino acids M1-K396, accession number NM_003384 and N-terminally fused to GST-HIS6-Thrombin cleavage site. Purified by GSH-agarose affinity purification.

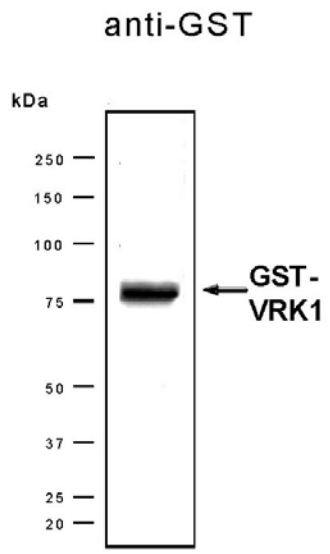
Application Notes: Recombinant VRK1 is suitable for kinase assays and Western blot. The molecular weight of the protein is ~75.142 kDa. The activity of the protein is 30 pmol/µgxmin.

Recommended kinase reaction conditions: 60 mM HEPES-NaOH, pH 7.5, 3 mM $MgCl_2$, 3 mM $MnCl_2$, 3 µM Na-orthovanadate, 1.2 mM DTT, 50 µg / ml $PEG_{20.000}$, ATP (variable), Substrate: R11-S6-Peptide, (R11-IAKRRRLSSLRASTSKSESSQK), 200 µg / µl, VRK1: 4.0 µg / ml

Kinase activity may vary depending on the substrate and reaction conditions used.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



Recombinant VRK1 protein tested by SDS-PAGE gel.
2 µg of VRK1 protein was analyzed using SDS/PAGE followed by Western blot with an anti-GST antibody.