

## Product Information

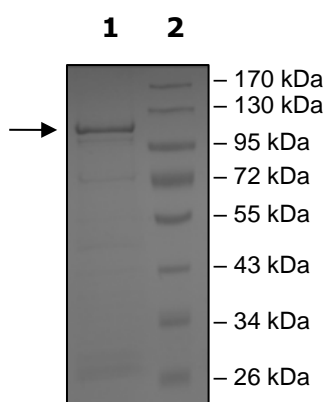
<b>Construct:</b>	PIKFYVE (GST-1400-2098(end))
<b>Concentration:</b>	0.10 mg/ml
<b>Species:</b>	Human
<b>Formulated In:</b>	50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, 25% glycerol
<b>Expression System:</b>	Sf9
<b>Format:</b>	Aqueous buffer solution
<b>Stability:</b>	At least 6 months at -80°C. Avoid freeze/thaw cycles.
<b>Storage:</b>	-80°C
<b>Genbank Accession:</b>	NM_015040
<b>MW:</b>	110 kDa
<b>Purity:</b>	85%
<b>Specific Activity:</b>	110 pmol/min/μg
<b>Assay Conditions:</b>	PIKFYVE activity was measured using the ADP-Glo™ Kinase Assay kit (Promega; Cat# V9101) which quantifies the amount of ADP produced by phosphorylation. The ADP-Glo™ Reagent is added to terminate the reaction and quench the remaining ATP. The Kinase Detection Reagent is then added to convert ADP to ATP and to measure the newly converted ATP using a luciferase reaction.

Assay: kinase activity was measured using a PIP3:PS substrate (250:2000 μM stock solution, sonicated for 1 min before use). The reaction was initiated by mixing increasing amounts of the protein kinase with 50 μM ATP (final concentration) in 45 mM HEPES, pH 7.5, 40 mM NaCl, 1.6 mM MgCl<sub>2</sub>, 0.5 mM EGTA, 20 μg/ml BSA, 40 μM fresh DTT, 0.03% Triton-X100 and PIP3:PS substrate (50:400 μM final). The reaction was terminated by addition of an equal volume of the ADP-Glo™ Reagent supplemented with 10mM MgCl<sub>2</sub>, and the Kinase Detection Reagent was added. Phosphorylation was measured by detection of luminescence. The blank was determined from a “no kinase” sample.

**Applications:** Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

## Quality Control Data

4-20% SDS-Page Coomassie Staining



Specific Activity

