

Product datasheet

Recombinant Human FGR protein ab158444

1 Image

Overview

<b>Product name</b>	Recombinant Human FGR protein
<b>Protein length</b>	Protein fragment

Description

<b>Nature</b>	Recombinant
<b>Source</b>	Wheat germ
<b>Amino Acid Sequence</b>	
<b>Species</b>	Human
<b>Sequence</b>	MGCVFCKKLEPVATAKEDAGLEGDFRSYGAADHYGP DPTKARPASSFAHI PNYSNFSSQAINPGFLDSGTIRGVSGIGVTLFIALYDYE
<b>Amino acids</b>	1 to 90
<b>Tags</b>	GST tag N-Terminus

Specifications

Our [Abpromise guarantee](#) covers the use of **ab158444** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>Applications</b>	Western blot ELISA
<b>Form</b>	Liquid
<b>Additional notes</b>	Protein concentration is above or equal to 0.05 mg/ml.

Preparation and Storage

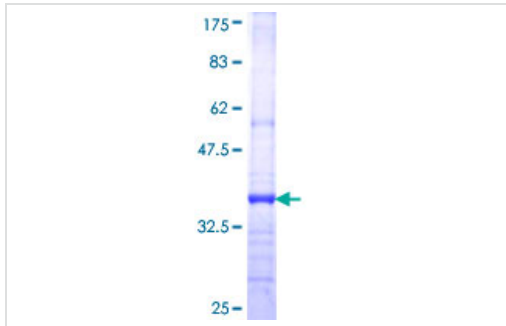
<b>Stability and Storage</b>	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl
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General Info

<b>Function</b>	<p>Non-receptor tyrosine-protein kinase that transmits signals from cell surface receptors devoid of kinase activity and contributes to the regulation of immune responses, including neutrophil, monocyte, macrophage and mast cell functions, cytoskeleton remodeling in response to extracellular stimuli, phagocytosis, cell adhesion and migration. Promotes mast cell degranulation, release of inflammatory cytokines and IgE-mediated anaphylaxis. Acts downstream of receptors that bind the Fc region of immunoglobulins, such as MS4A2/FCER1B, FCGR2A and/or FCGR2B. Acts downstream of ITGB1 and ITGB2, and regulates actin cytoskeleton reorganization, cell spreading and adhesion. Depending on the context, activates or inhibits cellular responses. Functions as negative regulator of ITGB2 signaling, phagocytosis and SYK activity in monocytes. Required for normal ITGB1 and ITGB2 signaling, normal cell spreading and adhesion in neutrophils and macrophages. Functions as positive regulator of cell migration and regulates cytoskeleton reorganization via RAC1 activation. Phosphorylates SYK (in vitro) and promotes SYK-dependent activation of AKT1 and MAP kinase signaling. Phosphorylates PLD2 in antigen-stimulated mast cells, leading to PLD2 activation and the production of the signaling molecules lysophosphatidic acid and diacylglycerol. Promotes activation of PIK3R1. Phosphorylates FASLG, and thereby regulates its ubiquitination and subsequent internalization. Phosphorylates ABL1. Promotes phosphorylation of CBL, CTTN, PIK3R1, PTK2/FAK1, PTK2B/PYK2 and VAV2. Phosphorylates HCLS1 that has already been phosphorylated by SYK, but not unphosphorylated HCLS1.</p>
<b>Tissue specificity</b>	<p>Detected in neutrophils, monocytes and natural killer cells (at protein level). Detected in monocytes and large lymphocytes.</p>
<b>Involvement in disease</b>	<p>Mutations that cause aberrant kinase activation can confer oncogene activity and promote aberrant cell proliferation.</p>
<b>Sequence similarities</b>	<p>Belongs to the protein kinase superfamily. Tyr protein kinase family. SRC subfamily. Contains 1 protein kinase domain. Contains 1 SH2 domain. Contains 1 SH3 domain.</p>
<b>Post-translational modifications</b>	<p>Ubiquitinated. Becomes ubiquitinated in response to ITGB2 signaling; this does not lead to degradation. Phosphorylated. Autophosphorylated on tyrosine residues. Becomes phosphorylated in response to FCGR2A and/or FCGR2B engagement, cell adhesion and signaling by ITGB2. Prior phosphorylation at Tyr-523 by SRC inhibits ulterior autophosphorylation at Tyr-412.</p>
<b>Cellular localization</b>	<p>Cell membrane. Cell membrane. Cell projection &gt; ruffle membrane. Cytoplasm &gt; cytosol. Cytoplasm &gt; cytoskeleton. Mitochondrion inner membrane. Mitochondrion intermembrane space. Detected in mitochondrial intermembrane space and at inner membranes (By similarity). Colocalizes with actin fibers at membrane ruffles. Detected at plasma membrane lipid rafts.</p>

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## Images



ab158444 on a 12.5% SDS-PAGE stained with Coomassie Blue.

SDS-PAGE - Recombinant Human FGR protein  
(ab158444)

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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