

## c-FER Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51206

# Specification

# c-FER Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, ICC, IHC-P, E <u>P16591</u> Human Rabbit Polyclonal 95 KDa

# c-FER Antibody - Additional Information

Gene ID 2241

Other Names

Tyrosine-protein kinase Fer, Feline encephalitis virus-related kinase FER, Fujinami poultry sarcoma/Feline sarcoma-related protein Fer, Proto-oncogene c-Fer, Tyrosine kinase 3, p94-Fer, FER, TYK3

**Dilution** WB~~1:1000 ICC~~N/A IHC-P~~N/A E~~N/A

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C.Stable for 12 months from date of receipt

# c-FER Antibody - Protein Information

Name FER

Synonyms TYK3

## Function

Tyrosine-protein kinase that acts downstream of cell surface receptors for growth factors and plays a role in the regulation of the actin cytoskeleton, microtubule assembly, lamellipodia formation, cell adhesion, cell migration and chemotaxis. Acts downstream of EGFR, KIT, PDGFRA and PDGFRB. Acts downstream of EGFR to promote activation of NF- kappa-B and cell proliferation. May play a role in the regulation of the mitotic cell cycle. Plays a role in the insulin receptor signaling pathway and in activation of phosphatidylinositol 3-kinase. Acts downstream of the activated FCER1 receptor and plays a role in FCER1 (high affinity immunoglobulin epsilon



receptor)-mediated signaling in mast cells. Plays a role in the regulation of mast cell degranulation. Plays a role in leukocyte recruitment and diapedesis in response to bacterial lipopolysaccharide (LPS). Plays a role in synapse organization, trafficking of synaptic vesicles, the generation of excitatory postsynaptic currents and neuron-neuron synaptic transmission. Plays a role in neuronal cell death after brain damage. Phosphorylates CTTN, CTNND1, PTK2/FAK1, GAB1, PECAM1 and PTPN11. May phosphorylate JUP and PTPN1. Can phosphorylate STAT3, but the biological relevance of this depends on cell type and stimulus.

#### **Cellular Location**

Cytoplasm. Cytoplasm, cytoskeleton. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection. Cell junction. Membrane; Peripheral membrane protein; Cytoplasmic side. Nucleus. Cytoplasm, cell cortex. Note=Associated with the chromatin. Detected on microtubules in polarized and motile vascular endothelial cells. Colocalizes with F-actin at the cell cortex. Colocalizes with PECAM1 and CTNND1 at nascent cell-cell contacts

#### Tissue Location

Isoform 1 is detected in normal colon and in fibroblasts (at protein level). Isoform 3 is detected in normal testis, in colon carcinoma-derived metastases in lung, liver and ovary, and in colon carcinoma and hepato carcinoma cell lines (at protein level) Isoform 3 is not detected in normal colon or in normal fibroblasts (at protein level). Widely expressed.

## c-FER Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

c-FER Antibody - Images

## c-FER Antibody - Background

Tyrosine-protein kinase that acts downstream of cell surface receptors for growth factors and plays a role in the regulation of the actin cytoskeleton, microtubule assembly, lamellipodia formation, cell adhesion, cell migration and chemotaxis. Acts downstream of EGFR, KIT, PDGFRA and PDGFRB. Acts downstream of EGFR to promote activation of NF-kappa-B and cell proliferation. May play a role in the regulation of the mitotic cell cycle. Plays a role in the insulin receptor signaling pathway and in activation of phosphatidylinositol 3-kinase. Acts downstream of the activated FCER1 receptor and plays a role in FCER1 (high affinity immunoglobulin epsilon receptor)-mediated signaling in mast cells. Plays a role in the regulation of mast cell degranulation. Plays a role in leukocyte recruitment and diapedesis in response to bacterial lipopolysaccharide (LPS). Plays a role in synapse organization, trafficking of synaptic vesicles, the generation of excitatory postsynaptic currents and neuron-neuron synaptic transmission. Plays a role in neuronal cell death after brain damage. Phosphorylates CTTN, CTNND1, PTK2/FAK1, GAB1, PECAM1 and PTPN11. May phosphorylate JUP and PTPN1. Can phosphorylate STAT3, but the biological relevance of this depends on cell type and stimulus.

## c-FER Antibody - References

Hao Q.-L., et al. Mol. Cell. Biol. 9:1587-1593(1989).



Makovski A., et al.J. Biol. Chem. 287:6100-6112(2012). Ota T., et al.Nat. Genet. 36:40-45(2004). Schmutz J., et al.Nature 431:268-274(2004). Mural R.J., et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.