10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-c-FER Antibody

Catalog # AP51206

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P16591
Reactivity	Human, Pig, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	94638

Additional Information

Gene ID	2241
Other Names	TYK3; 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
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human c-FER. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

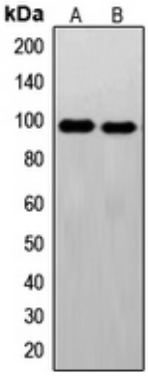
Name	FER
Synonyms	TYK3
Function	Tyrosine-protein kinase that acts downstream of cell surface receptors for growth factors and plays a role in the regulation of the actin cytoskeleton, microtubule assembly, lamellipodia formation, cell adhesion, cell migration and chemotaxis. Acts downstream of EGFR, 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.

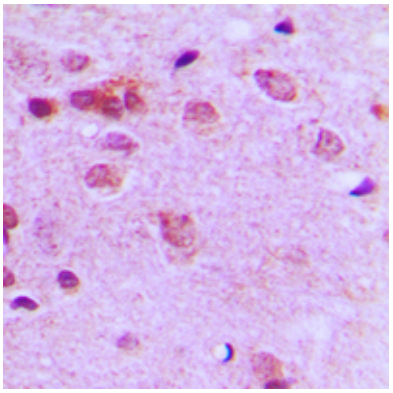
References

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Ota T.,et al.Nat. Genet. 36:40-45(2004).
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Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

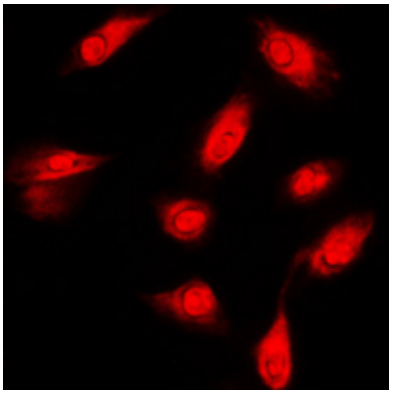
Images



Western blot analysis of c-FER expression in Jurkat (A), HeLa (B) whole cell lysates. (Predicted band size: 94 kD; Observed band size: 95 kD)



Immunohistochemical analysis of c-FER staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of c-FER staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

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