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Anti-FER Antibody

Catalog # ABO11189

Product Information

Application	WB, IHC-P
Primary Accession	P16591
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Tyrosine-protein kinase Fer(FER) detection. Tested with WB, IHC-P in Human;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	2241
Other Names	Tyrosine-protein kinase Fer, 2.7.10.2, 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
Calculated MW	94638
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Rat, By Heat Western blot, 0.1-0.5 □g/ml, Human, Rat
Subcellular Localization	Cytoplasm. Cytoplasm, cytoskeleton. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection. Cell junction. Membrane; Peripheral membrane protein; Cytoplasmic side. Nucleus. Cytoplasm, cell cortex. 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 Specificity	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. .
Source	Eukaryota
Protein Name	Tyrosine-protein kinase Fer
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg

	Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human FER(521-536aa FSNIPQLIDHHYTTKQ), different from the related rat and mouse sequences by two amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the protein kinase superfamily. Tyr protein kinase family. Fes/fps subfamily.

Protein Information

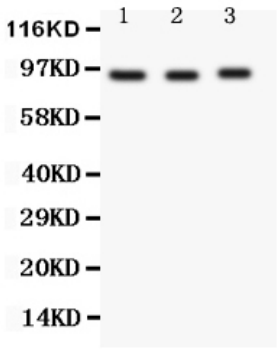
Name	FER
Synonyms	TYK3
Function	Tyrosine-protein kinase that acts downstream of cell surface receptors for growth factors and plays a role in the regulation of the actin cytoskeleton, microtubule assembly, lamellipodia formation, cell adhesion, cell migration and chemotaxis. Acts downstream of EGFR,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

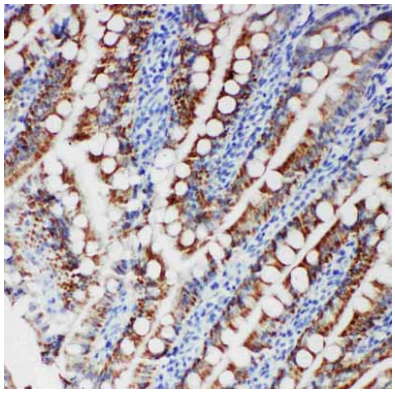
FER(FPS/FES-Related tyrosine kinase) also known as TYK3, is an enzyme that in humans is encoded by the

FER gene. Fer protein is a member of the FPS/FES family of nontransmembrane receptor tyrosine kinases. By in situ hybridization, Morris et al.(1990) concluded that the FER gene is located at 5q21-q22. Treatment of cells with JMP resulted in the release of FER from the cadherin complex and its accumulation in the integrin complex. The accumulation of FER in the integrin complex and the inhibitory effects of JMP could be reversed with a peptide that mimics the first coiled-coil domain of FER. The results suggested that FER mediates crosstalk between CDH2 and ITGB1. In Fer mutant mice, leukocyte emigration was exaggerated in response to LPS without altering vascular permeability, suggesting that FER has a role in regulating innate immunity.

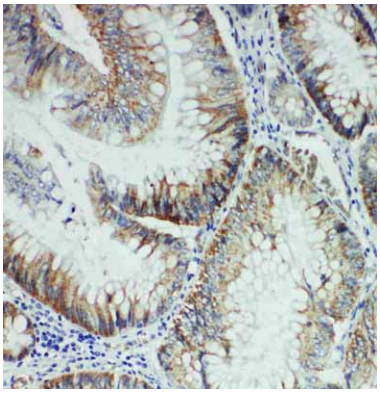
Images



Anti-FER antibody, ABO11189, Western blottingAll lanes: Anti FER (ABO11189) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: Rat Testis Tissue Lysate at 50ugLane 3: Rat Ovary Tissue Lysate at 50ugPredicted bind size: 95KDObserved bind size: 95KD



Anti-FER antibody, ABO11189, IHC(P)IHC(P): Human Intestinal Cancer Tissue



Anti-FER antibody, ABO11189, IHC(P)IHC(P): Rat Intestine Tissue

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.