

Anti-FES Antibody

Catalog # ABO11163

Specification

Anti-FES Antibody - Product Information

ApplicationWBPrimary AccessionP07332HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Tyrosine-protein kinase Fes/Fps(FES) detection. Tested with WB in Human:Mouse:Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-FES Antibody - Additional Information

Gene ID 2242

Other Names Tyrosine-protein kinase Fes/Fps, 2.7.10.2, Feline sarcoma/Fujinami avian sarcoma oncogene homolog, Proto-oncogene c-Fes, Proto-oncogene c-Fps, p93c-fes, FES, FPS

Calculated MW 93497 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat

Subcellular Localization

Cytoplasm, cytosol. Cytoplasm, cytoskeleton. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasmic vesicle. Golgi apparatus. Cell junction, focal adhesion. Distributed throughout the cytosol when the kinase is not activated. Association with microtubules requires activation of the kinase activity. Shuttles between focal adhesions and cell-cell contacts in epithelial cells. Recruited to the lateral cell membrane in polarized epithelial cells by interaction with phosphorylated EZR. Detected at tubular membrane structures in the cytoplasm and at the cell periphery.

Tissue Specificity Widely expressed. Detected in adult colon epithelium. .

Protein Name Tyrosine-protein kinase Fes/Fps

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 at the C-terminus of human FES(644-663aa FLTFLRTEGARLRVKTLLQM), identical to the related mouse and rat sequences.

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.

Anti-FES Antibody - Protein Information

Name FES

Synonyms FPS

Function

Tyrosine-protein kinase that acts downstream of cell surface receptors and plays a role in the regulation of the actin cytoskeleton, microtubule assembly, cell attachment and cell spreading. Plays a role in FCER1 (high affinity immunoglobulin epsilon receptor)-mediated signaling in mast cells. Acts down-stream of the activated FCER1 receptor and the mast/stem cell growth factor receptor KIT. Plays a role in the regulation of mast cell degranulation. Plays a role in the regulation of cell differentiation and promotes neurite outgrowth in response to NGF signaling. Plays a role in cell scattering and cell migration in response to HGF-induced activation of EZR. Phosphorylates BCR and down-regulates BCR kinase activity. Phosphorylates HCLS1/HS1, PECAM1, STAT3 and TRIM28.

Cellular Location

Cytoplasm, cytosol. Cytoplasm, cytoskeleton. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasmic vesicle. Golgi apparatus. Cell junction, focal adhesion Note=Distributed throughout the cytosol when the kinase is not activated. Association with microtubules requires activation of the kinase activity. Shuttles between focal adhesions and cell-cell contacts in epithelial cells. Recruited to the lateral cell membrane in polarized epithelial cells by interaction with phosphorylated EZR Detected at tubular membrane structures in the cytoplasm and at the cell periphery

Tissue Location

Widely expressed. Detected in adult colon epithelium (at protein level) (PubMed:16455651, PubMed:19051325) Expressed in melanocytes (at protein level) (PubMed:28463229)

Anti-FES 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
- <u>Flow Cytomety</u>
- <u>Cell Culture</u>

Anti-FES Antibody - Images



Anti-FES antibody, ABO11163, All Western blottingAll lanes: Anti-FES(ABO11163) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: 293T Whole Cell Lysate at 40ugLane 3: SKOV Whole Cell Lysate at 40ugLane 4: A549 Whole Cell Lysate at 40ugPredicted bind size: 93KDObserved bind size: 93KD

Anti-FES Antibody - Background

FES(feline sarcoma oncogene) is an enzyme that in humans is encoded by the FES gene, also known as Proto-oncogene tyrosine-protein kinase Fes/Fps, Feline sarcoma/Fujinami avian sarcoma oncogene homolog, Proto-oncogene c-Fes, Proto-oncogene c-Fps, p93c-fes c-fes/fps protein, FPS, Oncogene FES, feline sarcoma virus, FPS. This gene encodes the human cellular counterpart of a feline sarcoma retrovirus protein with transforming capabilities. Non-onc intervening sequences were present in the human counterpart. The gene product has tyrosine-specific protein kinase activity and that activity is required for maintenance of cellular transformation. Its chromosomal location has linked it to a specific translocation event identified in patients with acute promyelocytic leukemia, but it is also involved in normal hematopoiesis. A truncated transcript has been identified that is generated utilizing a start site in one of the far downstream exons but a protein product associated with this transcript has not been identified.