

FIRE (I-14): sc-66443

BACKGROUND

FIRE is a 689 amino acid protein that maps to human gene EMR4. FIRE is also known as EGF-like module-containing mucin-like hormone receptor-like 4 and is a member of the G protein-coupled receptor 2 family, LN-TM7 subfamily. The epidermal growth factor-transmembrane seven (EGF-TM7) family are proteins that express EGF-like domains at their extracellular N-terminus coupled to a classical seven transmembrane (TM7) cassette. FIRE is believed to mediate the cellular interaction between myeloid cells and B-cells. FIRE is a membrane bound, multi-pass protein that is proteolytically cleaved into 2 subunits, an extracellular α subunit and a seven-transmembrane subunit. FIRE contains one GPS (G protein-coupled receptor proteolytic cleavage site) domain and two EGF (epidermal growth factor)-like domains, the second of which mediates the interaction with the putative ligand.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: EMR4P (human) mapping to 19p13.2.

SOURCE

FIRE (I-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FIRE of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-66443 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FIRE (I-14) is recommended for detection of FIRE of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for FIRE siRNA (h): sc-62322, FIRE shRNA Plasmid (h): sc-62322-SH and FIRE shRNA (h) Lentiviral Particles: sc-62322-V.

Molecular Weight of FIRE: 51 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.