# FIRE (L-20): sc-66444



The Power to Question

#### **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 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 two subunits, an extracellular  $\alpha$  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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## **SOURCE**

FIRE (L-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of FIRE of rat origin.

## **STORAGE**

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

#### **PRODUCT**

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

Blocking peptide available for competition studies, sc-66444 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### **APPLICATIONS**

FIRE (L-20) is recommended for detection of FIRE of rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], 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).

Molecular Weight of FIRE: 77 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## **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.

**Santa Cruz Biotechnology, Inc.** 1.800.457.3801 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**