

# IZUMO2 (F-14): sc-241255

## BACKGROUND

IZUMO2 (izumo sperm-egg fusion protein 2) is a 220 amino acid single-pass membrane protein named after a Japanese shrine to marriage. Belonging to the Izumo family, IZUMO2 exists as two alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 19. Chromosome 19 consists of approximately 63 million bases and makes up over 2% of human genomic DNA. Chromosome 19 includes a diversity of interesting genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin superfamily members including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG families, and Fc $\alpha$  receptors. Key genes for eye color and hair color also map to chromosome 19. Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and Insulin-dependent diabetes have been linked to chromosome 19. Translocations with chromosome 19 and chromosome 14 can be seen in some lymphoproliferative disorders and typically involve the proto-oncogene BCL3.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Izumo2 (mouse) mapping to 7 B4.

## RESEARCH USE

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

## SOURCE

IZUMO2 (F-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of IZUMO2 of mouse origin.

## 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-241255 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

IZUMO2 (F-14) is recommended for detection of IZUMO2 of mouse origin and the corresponding rat homolog 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 IZUMO2 siRNA (m): sc-108380, IZUMO2 shRNA Plasmid (m): sc-108380-SH and IZUMO2 shRNA (m) Lentiviral Particles: sc-108380-V.

Molecular Weight of IZUMO2 isoforms 1/2: 25/21 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.