

EMP-2 (T-12): sc-132670

BACKGROUND

EMP-2 (epithelial membrane protein 2), also known as XMP, is a 167 amino acid multi-pass membrane protein that contains four-transmembrane domains and belongs to the GAS3/PMP22 (growth arrest-specific-3/peripheral myelin protein-22) family. Localized to lipid raft domains in the plasma membrane, EMP-2 regulates the expression of several target proteins and is necessary for blastocyst implantation in the uterine endometrium. Specifically, EMP-2 mediates blastocyst implantation by controlling the cell membrane expression of MHC and glycosylphosphatidylinositol-anchored proteins, as well as Integrins and caveolin-1. In adult tissues, EMP-2 is expressed in heart, lung, ovary and intestine, while fetal expression is highest in kidney, brain and liver. Overexpression of EMP-2 is associated with endometrial adenocarcinoma, suggesting a possible role for EMP-2 in tumorigenesis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Emp2 (mouse) mapping to 16 A1.

SOURCE

EMP-2 (T-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of EMP-2 of mouse 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-132670 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

EMP-2 (T-12) is recommended for detection of EMP-2 of mouse and rat 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 EMP-2 siRNA (m): sc-144647, EMP-2 shRNA Plasmid (m): sc-144647-SH and EMP-2 shRNA (m) Lentiviral Particles: sc-144647-V.

Molecular Weight of EMP-2: 18 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.