



α -FR (M-19): sc-16389

BACKGROUND

Folate is an essential vitamin that must be obtained from food intake through intestinal absorption in mammals. Folate and reduced folic acid derivatives bind to the folate receptor (FR) family, which mediates the endocytosis of 5-methyltetrahydrofolate into the cell. The folate receptors consist of five members, α , β , γ , γ' (which is produced by alternative splicing) and δ . β -FR is attached to the membrane by a GPI anchor and is expressed in malignant tissues of epithelial and nonepithelial origin. γ -FR is expressed in tissues of hematopoietic origin, such as spleen, thymus and bone marrow. The expression pattern of δ -FR is elusive, which suggests that it is highly restricted both spatially and temporally. The α isoform of the folate receptor is used as a highly selective tumor marker and may be targeted for the delivery of therapeutic compounds to tumor cells by coupling to derivatives of folic acid.

REFERENCES

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6. Wang, H., et al. 2000. Differentiation-independent retinoid induction of folate receptor type β , a potential tumor target in myeloid leukemia. *Blood* 96: 3529-3536.
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8. Zhu, W.Y., et al. 2001. The rate of Folate Receptor alpha (α -FR) synthesis in folate depleted CHL cells is regulated by a translational mechanism sensitive to media folate levels, while stable overexpression of its mRNA is mediated by gene amplification and an increase in transcript half-life. *J. Cell Biochem.* 81: 205-219.

SOURCE

α -FR (M-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of α -FR 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-16389 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

α -FR (M-19) is recommended for detection of α -FR 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 α -FR siRNA (m): sc-39970.

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.