

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human FOLR1 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human FOLR2, 3 or 4 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 548908
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human FOLR1 Arg25-Met233 Accession # P15328
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

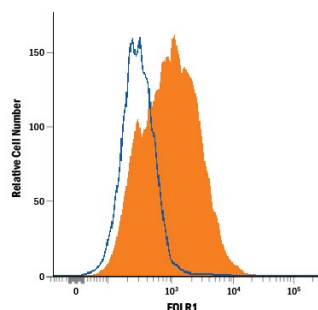
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Flow Cytometry	5 µL/10 ⁶ cells	See Below

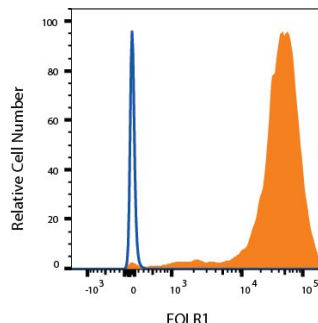
DATA

Flow Cytometry



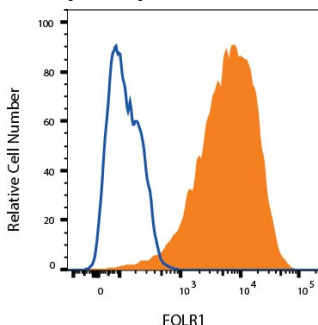
Detection of FOLR1 in MDA-MB-231 Human Cell Line by Flow Cytometry. MDA-MB-231 human breast cancer cell line was stained with Mouse Anti-Human FOLR1 Alexa Fluor® 700-conjugated Monoclonal Antibody (Catalog # FAB5646N, filled histogram) or isotype control antibody (Catalog # IC002N, open histogram). View our protocol for [Staining Membrane-associated Proteins](#).

Flow Cytometry



Detection of FOLR1 in HeLa cells by Flow Cytometry HeLa cells were stained with Mouse Anti-Human FOLR1 Alexa Fluor® 700-conjugated Monoclonal Antibody (Catalog # FAB5646N, filled histogram) or isotype control antibody (Catalog # IC002N, open histogram). View our protocol for [Staining Membrane-associated Proteins](#).

Flow Cytometry



Detection of FOLR1 in MCF-7 cells by Flow Cytometry MCF-7 cells were stained with Mouse Anti-Human FOLR1 Alexa Fluor® 700-conjugated Monoclonal Antibody (Catalog # FAB5646N, filled histogram) or isotype control antibody (Catalog # IC002N, open histogram). View our protocol for [Staining Membrane-associated Proteins](#).

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. • 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Folate Receptor 1 (FOLR1), also known as Folate Receptor alpha and Folate Binding Protein (FBP), is a 37-42 kDa protein that mediates the cellular uptake of folic acid and reduced folates. Dietary folates are required for many key metabolic processes including nucleotide and methionine synthesis, the interconversion of glycine and serine, and histidine breakdown (1, 2). Mature FOLR1 is an N-glycosylated protein that is anchored to the cell surface by a GPI linkage (3-6). Human FOLR1 shares 83% amino acid sequence identity with mouse and rat FOLR1. FOLR1 is predominantly expressed on epithelial cells and is dramatically up-regulated on many carcinomas (7, 8). It is critically required during early embryogenesis as shown in knockout mice which die *in utero* with gross morphological defects (9). FOLR1 is internalized to the endosomal system where it dissociates from its ligand before recycling to the cell surface (6, 10). A soluble form of FOLR1 can be proteolytically shed from the cell surface into the blood and breast milk (11).

References:

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4. Lacey, S.W. *et al.* (1989) *J. Clin. Invest.* **84**:715.
5. Elwood, P.C. (1989) *J. Biol. Chem.* **264**:14893.
6. Rijnboutt, S. *et al.* (1996) *J. Cell Biol.* **132**:35.
7. Ross, J.F. *et al.* (1994) *Cancer* **73**:2432.
8. Parker, N. *et al.* (2005) *Anal. Biochem.* **338**:284.
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10. Paulos, C.M. *et al.* (2004) *Mol. Pharmacol.* **66**:1406.
11. Elwood, P.C. *et al.* (1991) *J. Biol. Chem.* **266**:2346.

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