

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human FOLR1 in ELISAs and Western blots. In sandwich ELISAs, less than 0.2% cross-reactivity with recombinant human (rh) FOLR2, rhFOLR3, rhFOLR4 and recombinant mouse FOLR1 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Chinese hamster ovary cell line CHO-derived recombinant human FOLR1 Arg25-Met233 Accession # P15328
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

## 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.1 µg/mL	Recombinant Human FOLR1 (Catalog # 5646-FR)
<b>Human FOLR1 Sandwich Immunoassay</b>		<b>Reagent</b>
<b>ELISA Capture</b>	2-8 µg/mL	Human FOLR1 Antibody (Catalog # MAB5646)
<b>ELISA Detection</b>	0.1-0.4 µg/mL	Human FOLR1 Biotinylated Antibody (Catalog # BAF5646)
<b>Standard</b>		Recombinant Human FOLR1 (Catalog # 5646-FR)

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile Tris-buffered saline, pH 7.3 (20 mM Trizma base, 150 mM NaCl) containing 0.1% bovine serum albumin.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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 upregulated 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 serum and breast milk (11).

### References:

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