



[Go to Product page](#)

Datasheet for ABIN1889399

FOLR1 ELISA Kit

1 Image

Overview

Quantity:	96 tests
Target:	FOLR1
Binding Specificity:	AA 25-234
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	46.9-3000 pg/mL
Minimum Detection Limit:	46.9 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human FOLR1
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA), Saliva, Urine, Milk
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: E.coli Immunogen sequence: R25-S234
Specificity:	Expression system for standard: E.coli Immunogen sequence: R25-S234
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity: <10pg/mL

Material not included: Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl

Target Details

Target: FOLR1

Alternative Name: FOLR1 ([FOLR1 Products](#))

Background: Protein Function: Binds to folate and reduced folic acid derivatives and mediates delivery of 5-methyltetrahydrofolate and folate analogs into the interior of cells. Has high affinity for folate and folic acid analogs at neutral pH . Exposure to slightly acidic pH after receptor endocytosis triggers a conformation change that strongly reduces its affinity for folates and mediates their release. Required for normal embryonic development and normal cell proliferation. .

Background: Folate receptor 1 adult is a protein that in humans is encoded by the FOLR1 gene. The protein encoded by this gene is a member of the folate receptor(FOLR) family. It is mapped to 11q13.4. FOLR1 expression in Jurkat cells facilitated MBG or EBO entry, and FR-blocking reagents inhibited infection of MBG or EBO. This gene product is a secreted protein that either anchors to membranes via a glycosyl-phosphatidylinositol linkage or exists in a soluble form. The FOLR1 gene encodes the adult folate receptor, or folate-binding protein(FBP), which has a high affinity for folic acid and for several reduced folic acid derivatives, and mediates delivery of 5-methyltetrahydrofolate to the interior of cells. FOLR1 is also an important regulator of milk protein synthesis.

Synonyms: Folate receptor alpha,FR-alpha,Adult folate-binding protein,FBP,Folate receptor 1,Folate receptor, adult,KB cells FBP,Ovarian tumor-associated antigen MOV18,FOLR1,FOLR,
Full Gene Name: Folate receptor alpha

Cellular Localisation: Cell membrane, Lipid-anchor, GPI-anchor. Secreted . Cytoplasmic vesicle. Cytoplasmic vesicle, clathrin-coated vesicle. Endosome. Apical cell membrane . Endocytosed into cytoplasmic vesicles and then recycled to the cell membrane.

Gene ID: 2348

UniProt: [P15328](#)

Pathways: [Dicarboxylic Acid Transport](#)

Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Tissue Specificity: Primarily expressed in tissues of epithelial origin. Expression is increased in malignant tissues. Expressed in kidney, lung and cerebellum. Detected in placenta and thymus epithelium. .
Plate:	Pre-coated
Protocol:	human FOLR1 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for FOLR1 has been precoated onto 96-well plates. Standards(E.coli, R25-S234) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for FOLR1 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human FOLR1 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 3000pg/mL, 1500pg/mL, 750pg/mL, 375pg/mL, 188pg/mL, 94pg/mL, 46.9pg/mL human FOLR1 standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernates, serum, plasma(heparin, EDTA), saliva, urine or human milk to each empty well. See "Sample Dilution Guideline" above for details. We recommend that each human FOLR1 standard solution and each sample is measured in duplicate.

Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(pg/ml): 388, Standard deviation: 14.74, CV(%): 3.8• Sample 2: n=16, Mean(pg/ml): 1124, Standard deviation: 30.35, CV(%): 2.7• Sample 3: n=16, Mean(pg/ml): 2015, Standard deviation: 64.48, CV(%): 3.2,• Sample 1: n=24, Mean(pg/ml): 379, Standard deviation: 24.26, CV(%): 6.4• Sample 2: n=24, Mean(pg/ml): 1225, Standard deviation: 91.88, CV(%): 7.5• Sample 3: n=24, Mean(pg/ml): 1966, Standard deviation: 153.7, CV(%): 7.7
------------------	--

Restrictions:	For Research Use only
---------------	-----------------------

Handling

Handling Advice:	Avoid multiple freeze-thaw cycles.
------------------	------------------------------------

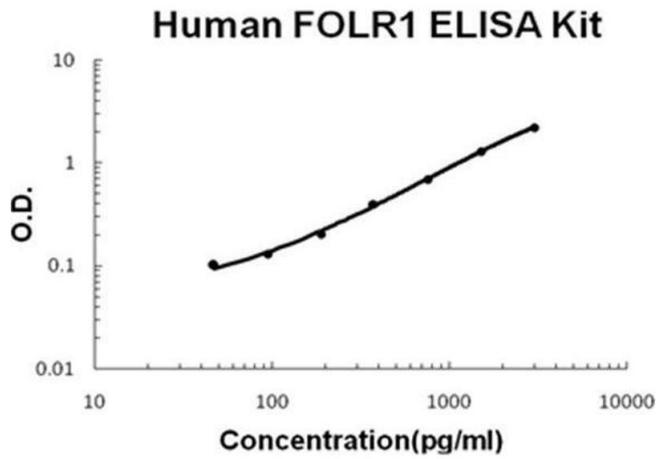
Storage:	-20 °C,4 °C
----------	-------------

Handling

Storage Comment: Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles

Expiry Date: 12 months

Images



ELISA

Image 1. Human FOLR1 PicoKine ELISA Kit standard curve