

APF460Hu01 100µg
Active Folate Receptor 1, Adult (FOLR1)
Organism Species: *Homo sapiens* (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Arg25~Ser234

Tags: N-terminal His-tag

Purity: >90%

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 5%Trehalose .

Original Concentration: 200µg/mL

Applications: Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 8.2

Predicted Molecular Mass: 25.9kDa

Accurate Molecular Mass: 28kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[**SEQUENCE**]

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RIAWAR TELLNVCNNA KHHKEKPGPE  
DKLHEQCRPW RKNACCSTNT SQEAHKDVSY LYRFNWNHCG EMAPACKRHF  
IQDTCLYECS PNLGPWIQQV DQSWRKERVL NVPLCKEDCE QWEDCRTSY  
TCKSNWHKGW NWTSGFNKCA VGAACQPFHF YFPTPTVLCN EIWTHSYKVS  
NYSRGSGRCI QMWFDPAQGN PNEEVARFYA AAMS
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[**ACTIVITY**]

Folate Receptor 1, Adult (FOLR1) is a member of the folate receptor family, which includes FOLR1, FOLR2, and FOLR3. These receptors are glycosylphosphatidylinositol (GPI)-linked cell surface glycoproteins that bind to folate with high affinity. FOLR1 is predominantly expressed in adult tissues, particularly in the epithelial cells of the lung, placenta, and kidney. It plays a critical role in the uptake of folate, which is essential for DNA synthesis and cell growth. FOLR1 is also a target for certain types of cancer therapy, as some tumors overexpress this receptor, making it a potential biomarker for targeted drug delivery systems. Besides, Epithelial Cell Adhesion Molecule (EPCAM) has been identified as an interactor of FOLR1, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human FOLR1 and recombinant human EPCAM. Briefly, FOLR1 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to EPCAM-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with anti-FOLR1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37°C, wells were aspirated and washed 5 times. With the addition of substrate solution,

wells were incubated 15-25 minutes at 37°C. Finally, add 50 µL stop solution to the wells and read at 450/630nm immediately. The binding activity of recombinant human FOLR1 and recombinant huma EPCAM was shown in Figure 1, the EC50 for this effect is 7.36ug/mL.

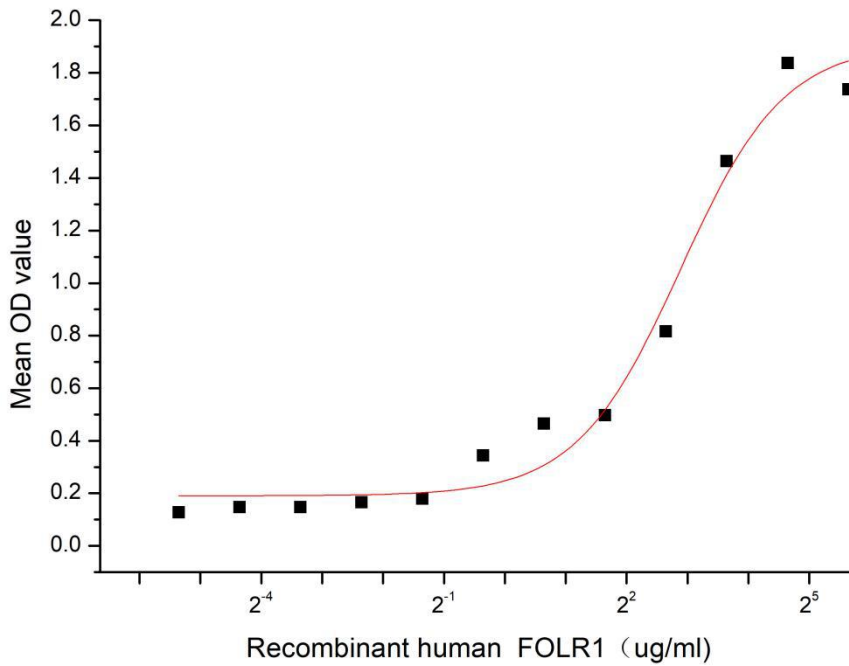


Figure 1. The binding activity of recombinant human FOLR1 and huma EPCAM

[IDENTIFICATION]

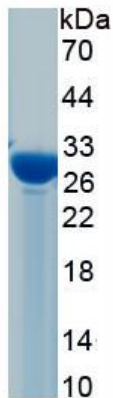


Figure 2. SDS-PAGE

Sample: Active recombinant FOLR1, Human

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.