



# Recombinant Protein Technical Manual

## Recombinant Mouse FOLR1 Protein (aa 25-232, His Tag)

RPE1732

### Product Data:

**Product SKU:** RPE1732

**Size:** 10µg

**Species:** Mouse

**Expression host:** Human Cells

**Uniprot:** P35846

### Protein Information:

**Molecular Mass:** 25.3 kDa

**AP Molecular Mass:** 33-37 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 95% as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Adult folate-binding protein; FBP; folate binding protein; folate receptor 1 (adult); Folate receptor 1; folate receptor alpha; Folate receptor, adult; Folbp1; FOLR; FOLR1; FR-alpha; KB cells FBP; MOv18; Ovarian tumor-associated antigen MOv18;FBP1;Folbp

## Immunogen Information:

**Sequence:** Thr25-Ser232

## Background:

Folate Receptor alpha belongs to the folate receptor family and it is a 37 - 42 kDa protein that mediates the cellular uptake of folic acid and reduced folates. Mature FOLR1 is an N-glycosylated protein that is anchored to the cell surface by a GPI linkage. FOLR1 can be detected in kidney proximal tubules. It is critically required during early embryogenesis as shown in knockout mice which die in utero with gross morphological defects. FOLR1 binds to folate and reduced folic acid derivatives and mediates delivery of 5-methyltetrahydrofolate and folate analogs into the interior of cells. It 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. Required for renal folate reabsorption.