

Recombinant Mouse FOLR1 Protein (aa 1-231, His Tag)

Catalog No. PKSM040605

Description

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-1
Species	Mouse
Expression_host	HEK293 Cells
Sequence	Met1-Met231
Accession	NP_032060.2
Mol_Mass	25.6 kDa
AP_Mol_Mass	33-37 kDa
Tag	C-His

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°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 sterile PBS, pH 7.4
Reconstitution	Please refer to the printed manual for detailed information.

Background

The protein encoded by FOLR1 gene is a member of the folate receptor family. Members of this gene family bind folic acid and its reduced derivatives, and transport 5-methyltetrahydrofolate into cells. This gene product is a secreted protein that either anchors to membranes via a glycosyl-phosphatidylinositol linkage or exists in a soluble form. Mutations in this gene have been associated with neurodegeneration due to cerebral folate transport deficiency. Due to the presence of two promoters, multiple transcription start sites, and alternative splicing, multiple transcript variants encoding the same protein have been found for this gene. Folate receptor α (FR α) is the most important subunit of Folate receptor and the alpha isoform has been shown to be selectively overexpressed in cancer types like breast and ovarian cancer compared to normal breast and ovarian epithelial cells. It was determined that Folate receptor α exhibits a limited expression on the apical surfaces of the epithelial cells of normal lung, breast, thyroid, parathyroid, and kidney tissues. For their uptake of folate, normal cells rely almost exclusively on the reduced folate carrier, whereas many carcinomas and myeloid leukemia cells overexpress a high-affinity FR on their surfaces, perhaps reflecting their increased need for folate to support rapid cell division.

SDS-PAGE

