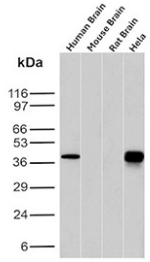
Folate receptor 1 Antibody / FOLR1 [clone FOLR1/12903R] (V6153)

Catalog No.	Formulation	Size
V6153-100UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6153-20UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug
V6153SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

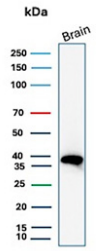
Recombinant RABBIT MONOCLONAL

Bulk quote request

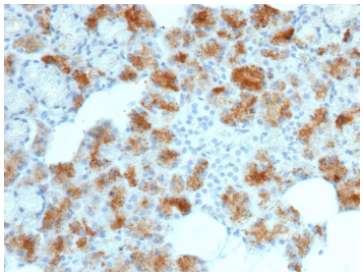
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	FOLR1/12903R
UniProt	P15328
Localization	Cell membrane, Cytoplasm, Secreted
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml Western Blot : 2-4ug/ml
Limitations	This Folate receptor 1 antibody is available for research use only.



Western blot analysis of Folate receptor alpha expression in tissue and cell lysates. Lysates from human brain, mouse brain, rat brain, and human HeLa cells were analyzed by western blot using recombinant Folate receptor 1 antibody (clone FOLR1/12903R). A single immunoreactive band is detected in human brain and HeLa lysates, while little to no signal is observed in mouse and rat brain samples. Although the predicted molecular weight of Folate receptor alpha is approximately 30 kDa based on sequence analysis, the protein is extensively glycosylated, resulting in a higher apparent molecular weight on SDS-PAGE.



Western blot analysis of Folate receptor alpha expression in human brain tissue. Lysates from human brain was analyzed by western blot using recombinant Folate receptor 1 antibody (clone FOLR1/12903R). A single immunoreactive band is detected in human brain lysate. Although the predicted molecular weight of Folate receptor alpha is approximately 30 kDa based on sequence analysis, the protein is extensively glycosylated, resulting in a higher apparent molecular weight on SDS-PAGE.



Immunohistochemistry of Folate receptor alpha in human adrenal gland tissue. Formalin-fixed, paraffin-embedded human adrenal gland tissue stained with recombinant Folate receptor 1 antibody (clone FOLR1/12903R) shows cytoplasmic punctate staining in adrenal cortical cells, with minimal signal in surrounding stromal regions. Inset shows negative control with PBS substituted for the primary antibody. Antigen retrieval was performed by heating tissue sections in 10 mM Tris with 1 mM EDTA, pH 9.0, at 95oC for 45 minutes, followed by cooling at room temperature for 20 minutes.

Description

Folate receptor 1 antibody is used to study Folate receptor 1, a high-affinity folate binding protein that mediates cellular uptake of folate through receptor-dependent endocytosis. Folate receptor 1 is encoded by the FOLR1 gene and belongs to a small family of folate receptors specialized for binding oxidized folates with high specificity. By facilitating folate internalization at the cell surface, Folate receptor 1 supports essential metabolic processes including nucleotide synthesis, DNA repair, and one-carbon metabolism.

Folate receptor 1 is a glycosylphosphatidylinositol-anchored protein localized primarily to the plasma membrane. This anchoring mechanism allows the receptor to cluster in membrane microdomains and undergo endocytic trafficking following folate binding. In polarized epithelial cells, Folate receptor 1 frequently localizes to the apical membrane, reflecting its role in directional nutrient uptake. Studies using Folate receptor 1 antibody have helped define receptor localization patterns and membrane dynamics associated with folate transport.

Physiologically, Folate receptor 1 is most prominently expressed in tissues with high folate demand, including placenta and kidney. In the placenta, Folate receptor 1 contributes to maternal-fetal folate transport, supporting embryonic development and cellular proliferation. This well-established placental expression has made Folate receptor 1 a widely studied marker for epithelial folate transport in developmental and reproductive biology research.

Altered expression of Folate receptor 1 has also been examined in disease-related contexts, particularly in epithelial malignancies where folate metabolism is frequently dysregulated. Increased Folate receptor 1 expression is thought to reflect metabolic adaptation rather than lineage specificity, linking receptor abundance to proliferative demand. Use of a Folate receptor 1 antibody supports investigation of folate utilization pathways and metabolic remodeling in both normal and pathological tissues.

Folate receptor 1 antibody (clone FOLR1/12903R) is designed to detect Folate receptor 1 in research applications. Analysis of FOLR1 expression enables assessment of folate binding capacity, membrane-associated receptor distribution, and tissue-specific metabolic regulation. Overall, Folate receptor 1 remains a central protein for studies of folate biology, epithelial physiology, and nutrient transport mechanisms.

Application Notes

Optimal dilution of the Folate receptor 1 antibody should be determined by the researcher.

Immunogen

A recombinant fragment (around amino acids 1-200) of human FOLR1 protein corresponding to the extracellular domain (exact sequence is proprietary) was used as the immunogen for the Folate receptor 1 antibody.

Storage

Folate receptor 1 antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.