



Anti-SLC46A1 (aa 1-50) polyclonal antibody (CPBT-54226RH)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Rabbit Polyclonal antibody to Human SLC46A1.
Antigen Description	This gene encodes a transmembrane proton-coupled folate transporter protein that facilitates the movement of folate and antifolate substrates across cell membranes, optimally in acidic pH environments. This protein is also expressed in the brain and choroid plexus where it transports folates into the central nervous system. This protein further functions as a heme transporter in duodenal enterocytes, and potentially in other tissues like liver and kidney. Its localization to the apical membrane or cytoplasm of intestinal cells is modulated by dietary iron levels. Mutations in this gene are associated with autosomal recessive hereditary folate malabsorption (HFM) disease. HFM is characterized by folate deficiency due to reduced intestinal folate absorption and subsequent anemia, hypoinnoglobulinemia, and recurrent infections. Alternatively spliced transcript variants encoding different isoforms have been described for this gene.
Specificity	Expressed in kidney, liver, placenta, small intestine, spleen, retina and retinal pigment epithelium. Lower levels found in colon and testis. Very low levels in brain, lung, stomach, heart and muscle. In intestine, expressed in duodenum with lower levels in jejunum, ileum, cecum, rectum and segments of the colon.
Immunogen	Synthetic peptide corresponding to a region within N terminal amino acids 1-50 (MEGSASPPEK PRARPAAAVL CRGPVEPLVF LANFALVLQG PLTTQYLWHR) of Human HCP1.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Purification	Immunogen affinity purified

Conjugate	Unconjugated
Applications	WB
Sequence Similarities	Belongs to the major facilitator superfamily. SLC46A family.
Cellular Localization	Apical cell membrane. Cytoplasm. Localizes to the apical membrane of intestinal cells in iron-deficient cells, while it resides in the cytoplasm in iron-replete cells.
Format	Liquid
Size	50 µg
Buffer	Preservative: NoneConstituents: 2% Sucrose, PBS
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.

GENE INFORMATION

Gene Name	SLC46A1 solute carrier family 46 (folate transporter), member 1 [Homo sapiens]
Official Symbol	SLC46A1
Synonyms	SLC46A1; solute carrier family 46 (folate transporter), member 1; solute carrier family 46, member 1; proton-coupled folate transporter; HCP1; heme carrier protein 1; MGC9564; PCFT; proton coupled folate transporter; G21; HCP 1; Heme carrier protein 1; MGC9564; PCFT; PCFT/HCP1; PCFT_HUMAN; PDE7A; Proton coupled folate transporter; Proton-coupled folate transporter; SLC46A1; Solute carrier family 46 member 1; G21; PCFT/HCP1; solute carrier family 46 member 1;
Entrez Gene ID	113235
Protein Refseq	NP_542400
UniProt ID	A0A024QZ44
Chromosome Location	17q11.2
Pathway	Iron uptake and transport, organism-specific biosystem; Metabolism, organism-specific biosystem; Metabolism of folate and pterines, organism-specific biosystem; Metabolism of vitamins and cofactors, organism-specific biosystem; Metabolism of water-soluble vitamins and cofactors, organism-specific biosystem; Mineral absorption, organism-specific biosystem; Mineral absorption, conserved biosystem; Transmembrane transport of small molecules,

organism-specific biosystem; Vitamin digestion and absorp.

Function

folic acid binding; folic acid transporter activity; heme transporter activity; transporter activity;
