Rabbit Polyclonal antibody to Human DMBT1.

CPBT-36045RH  Rabbit(DMBT1)
Lot. No. (See product label)

PRODUCT INFORMATION

Product Overview  Rabbit Polyclonal antibody to Human DMBT1.
Antigen Description  Loss of sequences from human chromosome 10q has been associated with the progression of human cancers. The gene DMBT1 was originally isolated based on its deletion in a medulloblastoma cell line. DMBT1 is expressed with transcripts of 6.0, 7.5, and 8.0 kb in fetal lung and with one transcript of 8.0 kb in adult lung, although the 7.5 kb transcript has not been characterized. The DMBT1 protein is a glycoprotein containing multiple scavenger receptor cysteine-rich (SRCR) domains separated by SRCR-interspersed domains (SID). Transcript variant 2 (8.0 kb) has been shown to bind surfactant protein D independently of carbohydrate recognition. This indicates that DMBT1 may not be a classical tumor suppressor gene, but rather play a role in the interaction of tumor cells and the immune system.

Specificity  Highly expressed in alveolar and macrophage tissues. In some macrophages, expression is seen on the membrane, and in other macrophages, strongly expressed in the phagosome/phagolysosome compartments. Expressed in lung, trachea, salivary gland, small intestine and stomach. In pancreas, expressed in certain cells of the islets of Langerhans. In digestive tract, confined to tissues with large epithelial surfaces. In intestinal tissue, moderately expressed in epithelial cells of the midcrypts and the crypt base. Expression is significantly elevated in intestinal tissue from patients with inflammatory bowel disease (IBD), particularly in surface epithelial and Paneth cells, but not in IBD patients with mutant NOD2. Present in crypt bases of the duodenum, in crypt tops of the colon, and in collecting ducts of the cortical kidney. Expressed in stratified squamous epithelium of vagina and in outer luminal surface and basilar region of columnar epithelial cells in cervix (at protein level). Isoform 1 is secreted to the lumen of the respiratory tract.

Target  DMBT1
Immunogen  Recombinant fragment, corresponding to a region within the internal sequence amino acids 2025-2273 of Human gp340.
Host  Rabbit
Isotype  IgG
Species  Human
Purification  Immunogen affinity purified
Applications  WB
Sequence similarities  Belongs to the DMBT1 family. Contains 2 CUB domains. Contains 14 SRCR domains. Contains 1 ZP domain.
Cellular localization  Secreted. Some isoforms may be membrane-bound. Localized to the luminal aspect of crypt cells in the small intestine. In the colon, seen in the luminal aspect of surface epithelial cells. Formed in the ducts of von Ebner gland, and released into the fluid bathing the taste buds contained in the taste papillae.
Domain  The SRCR domains mediate binding to bacteria. The minimal bacterial-binding site is an 11-residue repeat of GRVEVLRYGRSW where VEVL and W are critical residues.
Post-translation modifications  Highly N- and O-glycosylated. The O-glycans are heavily sulfated.

PACKAGING

Format  Liquid
Buffer  Preservative: 0.01% Thimerosal (merthiolate) Constituents: 10% Glycerol, 0.1M Tris, 0.1M Glycine, pH 7.0

Storage
Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

ANTIGEN GENE INFORMATION

Gene Name: DMBT1 deleted in malignant brain tumors 1 [ Homo sapiens ]
Official Symbol: DMBT1
Synonyms: DMBT1; deleted in malignant brain tumors 1; deleted in malignant brain tumors 1 protein; GP340; muclin; Apactin; CRP; CRP-[a]; CRP-[b]; CRP-ductin; Crpd; DMBT1; Deleted in malignant brain tumors 1; Deleted in malignant brain tumors 1 protein; DMBT1; DMBT1 prototype precursor; DMBT1/6kb.1 protein precursor; DMBT1/8kb.1 protein precursor; DMBT1/8kb.2 protein precursor; DMBT1_HUMAN; Ebnerin; FLJ61058; Glycoprotein 300; Glycoprotein 340; Gp 340; Gp-340; gp300; GP340; Gp340 variant protein; Hensin; MGC164738; Mucin-like glycoprotein; Muclin; OTTHUMP00000020654; OTTHUMP00000020655; OTTHUMP00000020656; OTTHUMP00000020657; OTTHUMP00000020658; OTTHUMP00000020659; OTTHUMP00000020660; OTTHUMP00000020661; OTTHUMP00000020662; OTTHUMP00000020663; p80; Pancrin; SAG; Salivary agglutinin; Surfactant pulmonary associated D binding protein; Surfactant pulmonary associated protein D binding protein; Surfactant pulmonary-associated D-binding protein; Vomeroglandin; SAG; gp-340; hensin; glycoprotein 340; salivary agglutinin; surfactant pulmonary-associated D-binding protein;

GeneID: 1755
mRNA Refseq: NM_017579
Protein Refseq: NP_060049
MIM: 601969
UniProt ID: Q9UGM3
Chromosome Location: 10q25.3-q26.1

Pathway: Salivary secretion, organism-specific biosystem; Salivary secretion, conserved biosystem;
Function: Gram-negative bacterial cell surface binding; Gram-positive bacterial cell surface binding; calcium-dependent protein binding; pattern recognition receptor activity; scavenger receptor activity; scavenger receptor activity; zymogen binding;

REFERENCES