Immunotag™ MTDH Monoclonal Antibody

Antibody Specification

Catalog No.	ITM0454
Product Description	Immunotag™ MTDH Monoclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	MTDH
Clonality	Monoclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,FCM,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/200 - 1/1000. Flow cytometry: 1/200 - 1/400. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human
Host Species	Mouse
Immunogen	Purified recombinant fragment of human MTDH expressed in E. Coli.
Specificity	MTDH Monoclonal Antibody detects endogenous levels of MTDH protein.
Purification	Affinity purification
Form	Ascitic fluid containing 0.03% sodium azide.
Gene Name	MTDH
Accession No.	Q86UE4 Q80WJ7
Alternate Names	MTDH; AEG1; LYRIC; Protein LYRIC; 3D3/LYRIC; Astrocyte elevated gene-1 protein; AEG-1; Lysine-rich CEACAM1 co-isolated protein; Metadherin; Metastasis adhesion protein

Antibody Specification

Description	caution:Was originally (PubMed:15093543) thought to be a type II membrane protein but this is inconsistent with the results of multiple phosphorylation studies because this topology would locate the phosphorylation sites in the lumen or extracellularly rather than in the cytoplasm.,function:Downregulates SLC1A2/EAAT2 promoter activity when expressed ectopically. Activates the nuclear factor kappa-B (NF-kappa-B) transcription factor. Promotes anchorage-independent growth of immortalized melanocytes and astrocytes which is a key component in tumor cell expansion. Promotes lung metastasis and also has an effect on bone and brain metastasis, possibly by enhancing the seeding of tumor cells to the target organ endothelium. Induces chemoresistance.,induction:By TNF-alpha (at protein level). By HIV-1 infection of primary fetal astrocytes.,miscellaneous:Knockdown significantly reduces the adhesion of cancer cells to lung microvascular endothelial cells and the reciprocal effect is observed following overexpression.,subcellular location:In epithelial cells, recruited to tight junctions (TJ) during the maturation of the TJ complexes. A nucleolar staining may be due to nuclear targeting of an isoform lacking the transmembrane domain (By similarity). TNF-alpha causes translocation from the cytoplasm to the nucleus.,subunit:Interacts with BCIPP, CREBBP/CBP and RELA/p65.,tissue specificity:Widely expressed with highest levels in muscle-dominating organs such as skeletal muscle, heart, tongue and small intestine and in endocrine glands such as thyroid and adrenal gland. Overexpressed in various cancers including breast, brain, prostate, melanoma and glioblastoma multiforme.,
Protein Expression	Brain,Colon carcinoma,Epithelium,Fetal astrocyte,Hepatoma,Platelet,Skin,Testis,
Subcellular Localization	nucleus,nucleolus,cytoplasm,endoplasmic reticulum,endoplasmic reticulum membrane,bicellular tight junction,integral component of membrane,apical plasma membrane,nuclear body,nuclear membrane,intercellular canaliculus,perinuclear region
Protein Function	caution:Was originally (PubMed:15093543) thought to be a type II membrane protein but this is inconsistent with the results of multiple phosphorylation studies because this topology would locate the phosphorylation sites in the lumen or extracellularly rather than in the cytoplasm.,function:Downregulates SLC1A2/EAAT2 promoter activity when expressed ectopically. Activates the nuclear factor kappa-B (NF-kappa-B) transcription factor. Promotes anchorage-independent growth of immortalized melanocytes and astrocytes which is a key component in tumor cell expansion. Promotes lung metastasis and also has an effect on bone and brain metastasis, possibly by enhancing the seeding of tumor cells to the target organ endothelium. Induces chemoresistance.,induction:By TNF-alpha (at protein level). By HIV-1 infection of primary fetal astrocytes.,miscellaneous:Knockdown significantly reduces the adhesion of cancer cells to lung microvascular endothelial cells and the reciprocal effect is observed following overexpression.,subcellular location:In epithelial cells, recruited to tight junctions (TJ) during the maturation of the TJ complexes. A nucleolar staining may be due to nuclear targeting of an isoform lacking the transmembrane domain (By similarity). TNF-alpha causes translocation from the cytoplasm to the nucleus.,subunit:Interacts with BCIPP, CREBBP/CBP and RELA/p65.,tissue specificity:Widely expressed with highest levels in muscle-dominating organs such as skeletal muscle, heart, tongue and small intestine and in endocrine glands such as thyroid and adrenal gland. Overexpressed in various cancers including breast, brain, prostate, melanoma and glioblastoma multiforme.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.