

Rabbit Anti-MTUS1 antibody

SL6076R

Product Name MTUS1

Chinese Name 微管相关 Tumour 抑制因子 1 抗体

Alias Angiotensin II type 2 receptor interacting protein; AT2 receptor interacting protein; AT2R binding protein; ATIP; ATIP1; Erythroid differentiation related; FLJ14295; GK 1; GK1; KIAA1288; Microtubule associated tumor suppressor 1; Mitochondrial tumor suppressor 1; Mitochondrial tumor suppressor gene 1; MP 44; MP44; MTSG 1; MTSG1; MTUS 1; Transcription factor MTSG1; MTUS1_HUMAN.

Research Area Tumour Cell biology immunology Chromatin and nuclear signals Mitochondrion

Immunogen Species Rabbit

Clonality Polyclonal

React Species Mouse, (predicted: Human, Rat, Chicken, Dog, Cow, Horse, Rabbit,)
WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)

Applications not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 141kDa

Cellular localization The cell membrane Mitochondrion

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human MTUS1: 1151-1270/1270

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human, therapeutic

or diagnostic applications.

PubMed

[PubMed](#)

This gene encodes a protein which contains a C-terminal domain able to interact with the angiotension II (AT2) receptor and a large coiled-coil region allowing dimerization. Multiple alternatively spliced transcript variants encoding different isoforms have been found for this gene. One of the transcript variants has been shown to encode a mitochondrial protein that acts as a tumor suppressor and participates in AT2 signaling pathways. Other variants may encode nuclear or transmembrane proteins but it has not been determined whether they also participate in AT2 signaling pathways. [provided by RefSeq, Jul 2008].

Function:

Cooperates with AGTR2 to inhibit ERK2 activation and cell proliferation. May be required for AGTR2 cell surface expression. Together with PTPN6, induces UBE2V2 expression upon angiotensin-II stimulation. Isoform 1 inhibits breast cancer cell proliferation, delays the progression of mitosis by prolonging metaphase and reduces tumor growth.

Subunit:

Homodimer. Interacts with AGTR2. Interacts with PTPN6 (By similarity). Isoform 1 associates with microtubules.

Subcellular Location:

Mitochondrion. Golgi apparatus (By similarity). Cell membrane (By similarity). Nucleus (By similarity). Note=In neurons, translocates into the nucleus after treatment with angiotensin-II (By similarity).

Isoform 1: Cytoplasm, cytoskeleton, centrosome. Cytoplasm, cytoskeleton, spindle.

Note=Localizes with the mitotic spindle during mitosis and with the intercellular bridge during cytokinesis.

Product Detail

Tissue Specificity:

Ubiquitously expressed (at protein level). Highly expressed in brain. Down-regulated in ovarian carcinoma, pancreas carcinoma, colon carcinoma and head and neck squamous cell carcinoma (HNSCC). Isoform 1 is the major isoform in most peripheral tissues. Isoform 2 is abundant in most peripheral tissues. Isoform 3 is the major isoform in brain, female reproductive tissues, thyroid and heart. Within brain it is highly expressed in corpus callosum and pons. Isoform 6 is brain-specific, it is the major isoform in cerebellum and fetal brain.

DISEASE:

Hepatocellular carcinoma (HCC) [MIM:114550]: A primary malignant neoplasm of epithelial liver cells. The major risk factors for HCC are chronic hepatitis B virus (HBV) infection, chronic hepatitis C virus (HCV) infection, prolonged dietary aflatoxin exposure, alcoholic cirrhosis, and cirrhosis due to other causes. Note=The gene represented in this entry may be involved in disease pathogenesis.

Similarity:

Belongs to the MTUS1 family.

SWISS:

Q9ULD2

Gene ID:

57509

Database links:

[Entrez Gene: 482896](#) Dog

[Entrez Gene: 57509](#) Human

[Entrez Gene: 102103](#) Mouse

[Entrez Gene: 306487](#) Rat

[Omim: 609589](#) Human

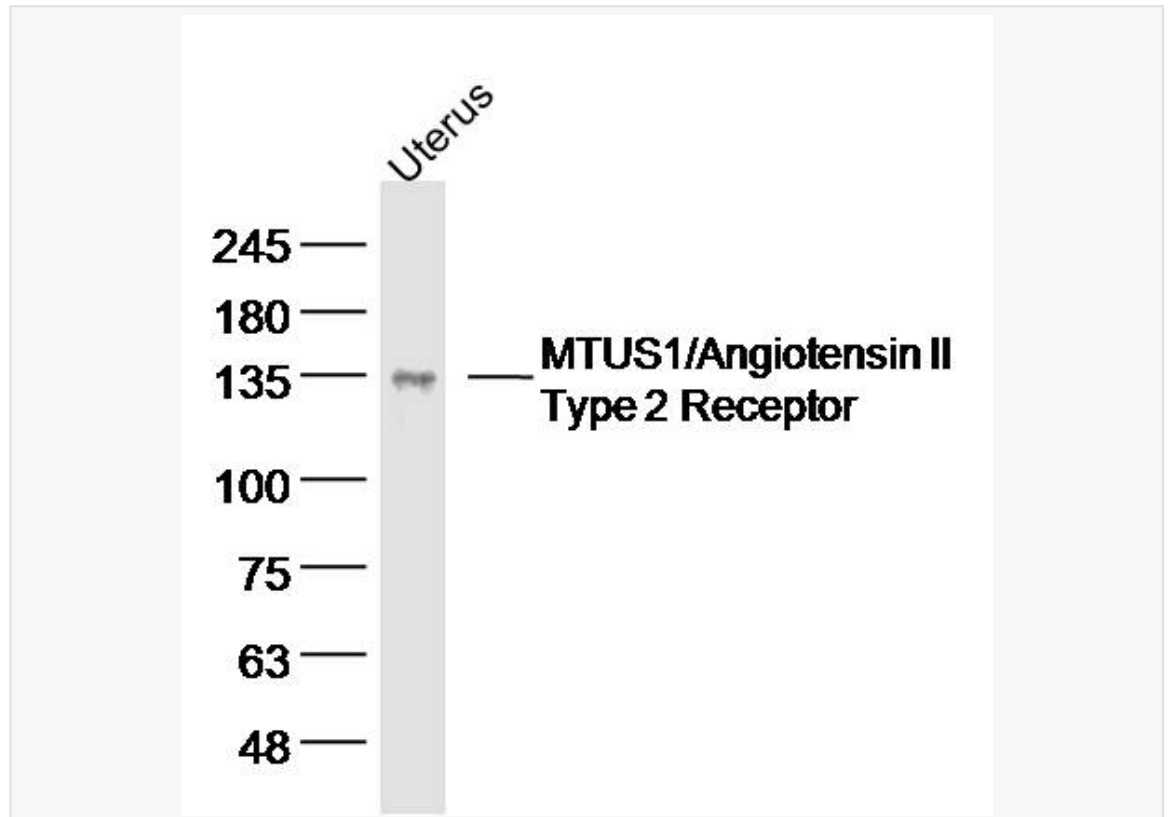
[SwissProt: Q9ULD2](#) Human

[SwissProt: Q5HZI1](#) Mouse

[SwissProt: Q6IMY1](#) Rat

[Unigene: 7946](#) Human

Product
Picture



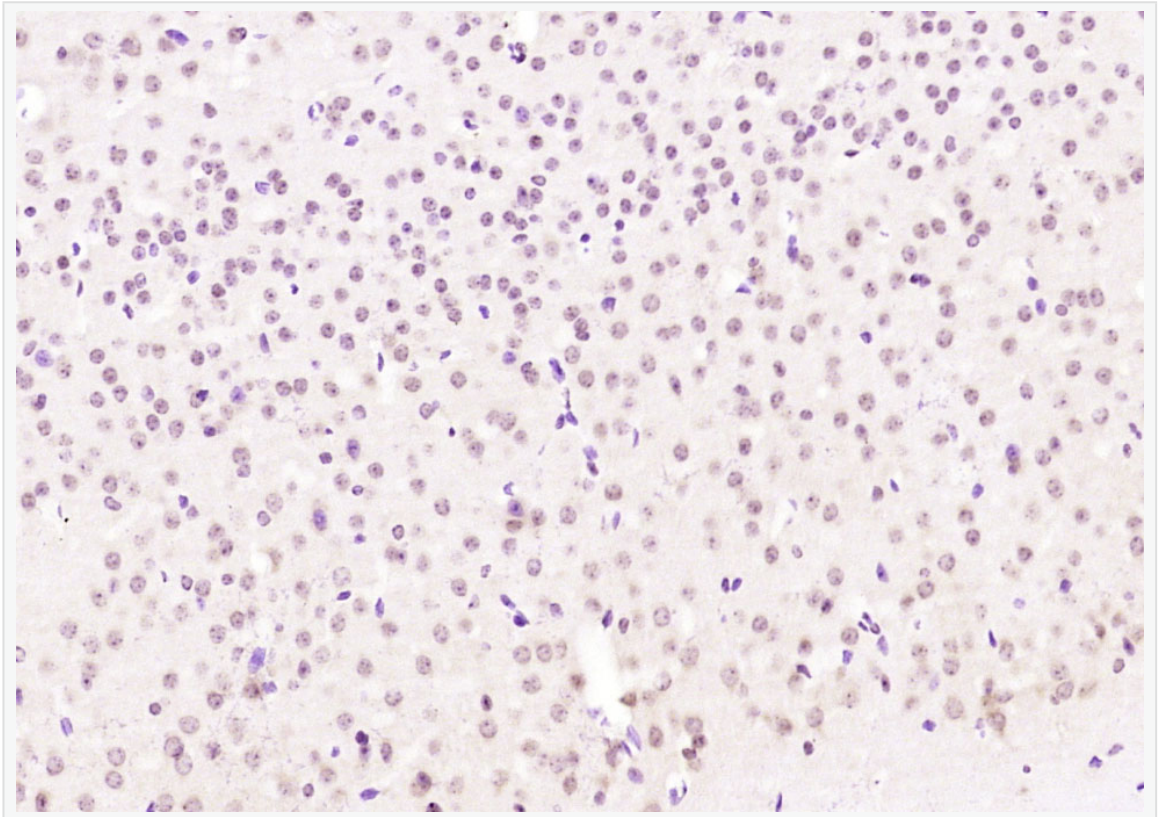
Sample: Uterus (mouse) Lysate at 40 ug

Primary: Anti- MTUS1/Angiotensin II Type 2 Receptor (SL6076R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 141 kD

Observed band size: 135 kD



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MTUS1 Angiotensin II Type 2 Receptor) Polyclonal Antibody, Unconjugated (SL6076R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.