

**Anti-MUT Picoband Antibody**  
Catalog # ABO10146**Specification**

---

**Anti-MUT Picoband Antibody - Product Information**

Application	<b>WB, IHC</b>
Primary Accession	<a href="#">P22033</a>
Host	<b>Rabbit</b>
Reactivity	<b>Human, Rat</b>
Clonality	<b>Polyclonal</b>
Format	<b>Lyophilized</b>

**Description**

Rabbit IgG polyclonal antibody for Methylmalonyl-CoA mutase, mitochondrial(MUT) detection. Tested with WB, IHC-P in Human;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-MUT Picoband Antibody - Additional Information**

**Gene ID** 4594

**Other Names**

Methylmalonyl-CoA mutase, mitochondrial, MCM, 5.4.99.2, Methylmalonyl-CoA isomerase, MUT

**Calculated MW**

83134 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat<br><br>Western blot, 0.1-0.5 µg/ml, Human, Rat<br>

**Subcellular Localization**

Mitochondrion matrix.

**Protein Name**

Methylmalonyl-CoA mutase, mitochondrial

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>N.

**Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human MUT (33-65aa LHQQQLHPEWAALAKKQLKGKNPEDLIWHTPE), different from the related mouse sequence by one amino acid.

**Purification**

Immunogen affinity purified.

### Cross Reactivity

No cross reactivity with other proteins

### Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

### Anti-MUT Picoband Antibody - Protein Information

Name MMUT ([HGNC:7526](#))

### Function

Catalyzes the reversible isomerization of methylmalonyl-CoA (MMCoA) (generated from branched-chain amino acid metabolism and degradation of dietary odd chain fatty acids and cholesterol) to succinyl-CoA (3-carboxypropionyl-CoA), a key intermediate of the tricarboxylic acid cycle.

### Cellular Location

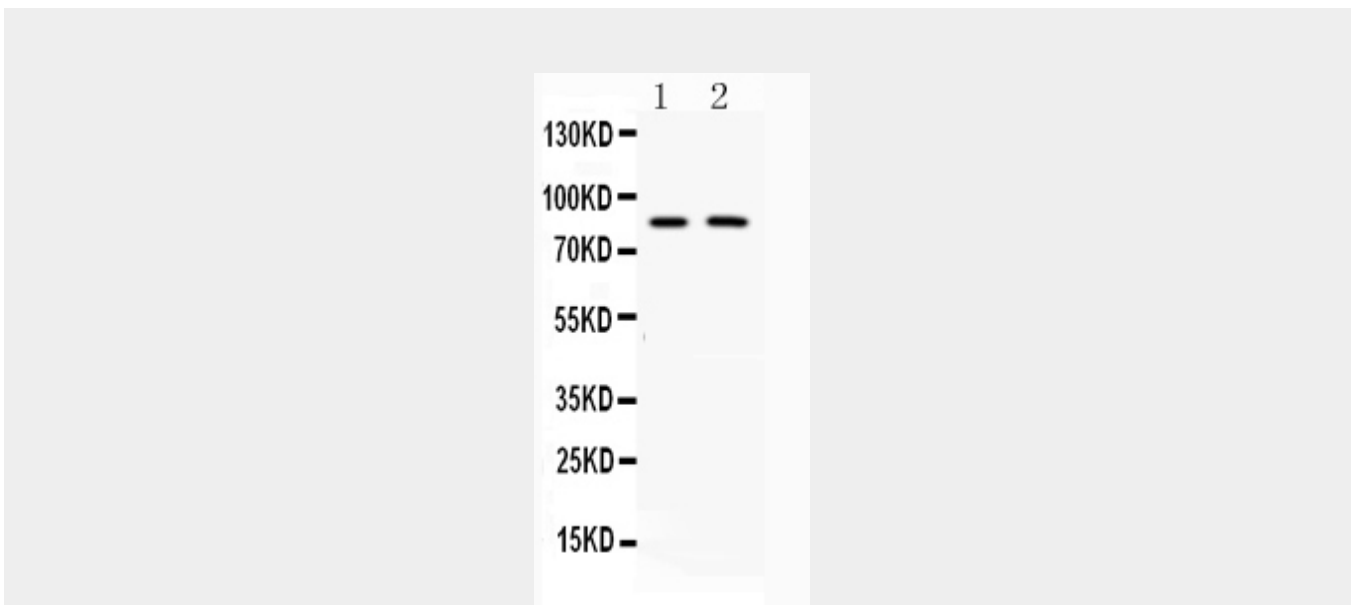
Mitochondrion matrix. Mitochondrion. Cytoplasm

### Anti-MUT Picoband Antibody - Protocols

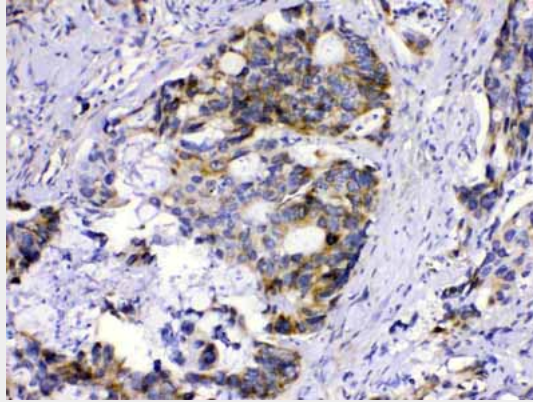
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

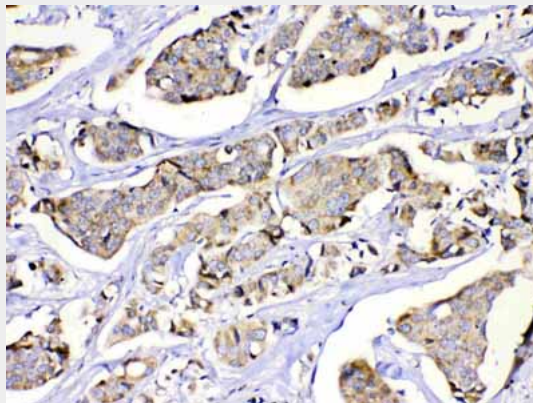
### Anti-MUT Picoband Antibody - Images



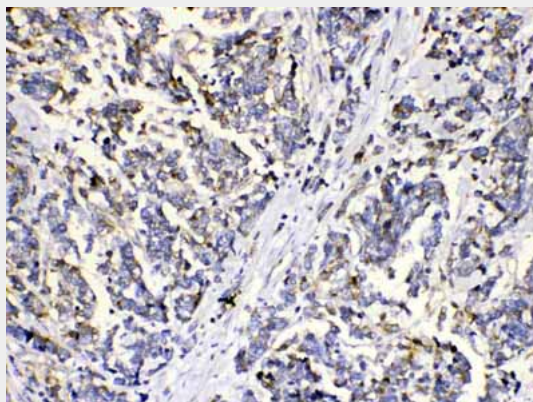
Western blot analysis of MUT expression in rat kidney extract (lane 1) and 22RV1 whole cell lysates (lane 2). MUT at 83KD was detected using rabbit anti- MUT Antigen Affinity purified polyclonal antibody (Catalog #ABO10146) at 0.5  $\mu$ g/mL. The blot was developed using chemiluminescence (ECL) method .



MUT was detected in paraffin-embedded sections of human intestinal cancer tissues using rabbit anti- MUT Antigen Affinity purified polyclonal antibody (Catalog # ABO10146) at 1  $\mu$ g/mL. The immunohistochemical section was developed using SABC method .



MUT was detected in paraffin-embedded sections of human lung cancer tissues using rabbit anti- MUT Antigen Affinity purified polyclonal antibody (Catalog # ABO10146) at 1  $\mu$ g/mL. The immunohistochemical section was developed using SABC method .



MUT was detected in paraffin-embedded sections of human mammary cancer tissues using rabbit anti- MUT Antigen Affinity purified polyclonal antibody (Catalog # ABO10146) at 1  $\mu$ g/mL. The immunohistochemical section was developed using SABC method .

#### **Anti-MUT Picoband Antibody - Background**

Methylmalonyl-CoA mutase (MUT) is a mitochondrial enzyme that catalyzes the isomerization of methylmalonyl-CoA to succinyl-CoA. This gene is mapped to 6p12.3. MUT requires a vitamin B12-derived prosthetic group, adenosylcobalamin (commonly referred to as AdoCbl), to function. And the product of this enzyme, succinyl-CoA, is a key molecule of the TCA cycle.