

**MTR Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP56887****Specification****MTR Polyclonal Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">Q99707</a>
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	140527

**MTR Polyclonal Antibody - Additional Information****Gene ID** 4548**Other Names**

Methionine synthase, MS, 2.1.1.13, 5-methyltetrahydrofolate--homocysteine methyltransferase, Cobalamin-dependent methionine synthase, Vitamin-B12 dependent methionine synthase, MTR ([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=7468](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=7468))  
HGNC:7468

**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**MTR Polyclonal Antibody - Protein Information****Name** MTR {ECO:0000303|PubMed:27771510, ECO:0000312|HGNC:HGNC:7468}**Function**

Catalyzes the transfer of a methyl group from methylcob(III)alamin (MeCbl) to homocysteine, yielding enzyme-bound cob(I)alamin and methionine in the cytosol (PubMed:[16769880](http://www.uniprot.org/citations/16769880), PubMed:[17288554](http://www.uniprot.org/citations/17288554), PubMed:[27771510](http://www.uniprot.org/citations/27771510)). MeCbl is an active form of cobalamin (vitamin B12) used as a cofactor for methionine biosynthesis. Cob(I)alamin form is regenerated to MeCbl by a transfer of a methyl group from 5-methyltetrahydrofolate (PubMed:[16769880](http://www.uniprot.org/citations/16769880), PubMed:[17288554](http://www.uniprot.org/citations/17288554), PubMed:[27771510](http://www.uniprot.org/citations/27771510)). The processing of cobalamin in the cytosol occurs in a multiprotein complex composed of at least MMACHC, MMADHC, MTRR (methionine synthase reductase) and MTR which may contribute to shuttle safely and efficiently cobalamin towards MTR

in order to produce methionine (PubMed:<a href="http://www.uniprot.org/citations/16769880" target="\_blank">16769880</a>, PubMed:<a href="http://www.uniprot.org/citations/27771510" target="\_blank">27771510</a>).

#### Cellular Location

Cytoplasm.

#### Tissue Location

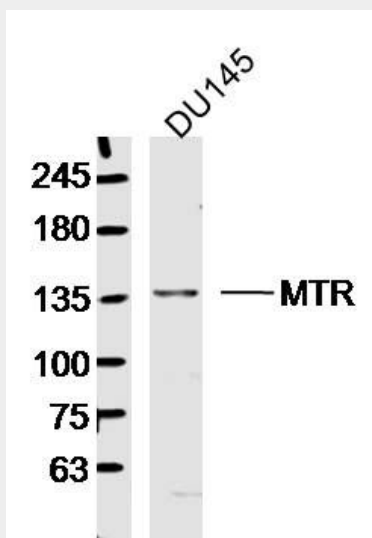
Widely expressed. Expressed at the highest levels in pancreas, heart, brain, skeletal muscle and placenta (PubMed:8968735, PubMed:8968737). Expressed at lower levels in lung, liver and kidney (PubMed:8968735, PubMed:8968737)

### MTR Polyclonal Antibody - Protocols

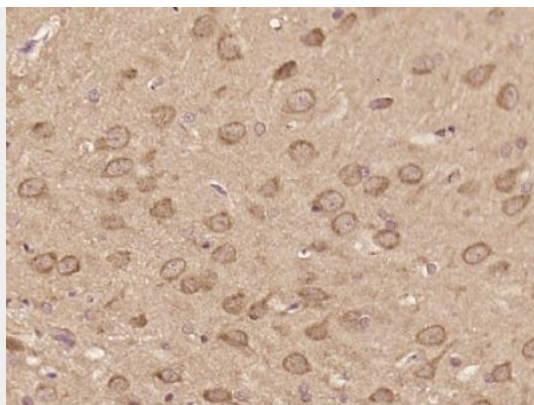
Provided below are standard protocols that you may find useful for product applications.

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

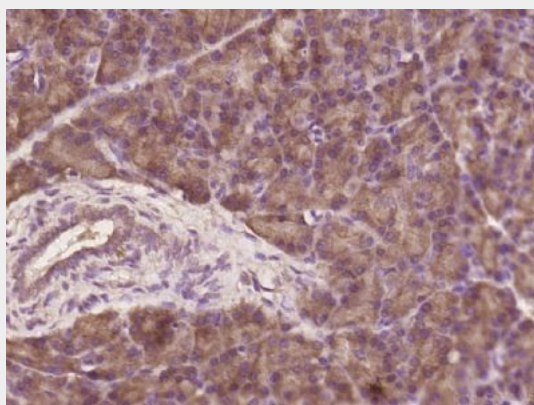
### MTR Polyclonal Antibody - Images



Sample: DU145 Cell (Human) Lysate at 40 ug  
Primary: Anti-MTR (bs-17892R) at 1/300 dilution  
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution  
Predicted band size: 140 kD  
Observed band size: 140 kD



Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); 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 (MTR) Polyclonal Antibody, Unconjugated (bs-17892R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat pancreas tissue); 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 (MTR) Polyclonal Antibody, Unconjugated (bs-17892R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.