

# Rabbit Anti-TOMM20 antibody

## SL22121R

Product Name:	TOMM20
Chinese Name:	Mitochondrion外膜受体Tom20抗体
Alias:	TOM20; KIAA0016; MAS20; MGC117367; Mitochondrial 20 kDa outer membrane protein; Mitochondrial import receptor subunit TOM20 homolog; MOM19; Outer mitochondrial membrane receptor Tom20; TOM 20; TOM20_HUMAN; Translocase of outer mitochondrial membrane 20 homolog (yeast); Translocase of outer mitochondrial membrane 20 homolog type II.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Pig, Cow, Horse, Rabbit, Sheep,
Applications:	IHC-P=1:400-800 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	16kDa
Cellular localization:	cytoplasmic Mitochondrion
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human TOMM20:1-100/145
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. 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.
PubMed:	<u>PubMed</u>
Product Detail:	The mitochondrial preprotein translocases of the outer membrane (Tom) is a multisubunit protein complex that facilitates the import of nucleus-encoded precursor proteins across the mitochondrial outer membrane (1). The Tom machinery consists of import receptors for the initial binding of cytosolically synthesized preproteins and a

general import pore (GIP) for the membrane translocation of various preproteins into the mitochondria (2). The import receptors include Tom20 and Tom22, which form a heteromeric receptor complex that initiates the insertion of newly synthesized proteins into the outer membrane and then directs the precursor protein into the GIP (3,4). In yeast, Tom22 is the essential component of the import receptor complex as it functions as both a receptor for the preproteins and serves as a docking point for both Tom20 and the GIP (5,6). Tom22 directly associates with Tom40, the major component of the GIP, and thereby forms a stable interaction between the two core complexes to facilitate the fluid movement of preproteins into the mitochondria (6,7). The insertion of Tom40 into the Tom machinery requires the initial binding of Tom40 to Tom20 and leads to the efficient incorporation of Tom40 precursors into preexisting Tom complexes (2,8)

#### Function:

Central component of the receptor complex responsible for the recognition and translocation of cytosolically synthesized mitochondrial preproteins. Together with TOM22 functions as the transit peptide receptor at the surface of the mitochondrion outer membrane and facilitates the movement of preproteins into the TOM40 translocation pore.

## **Subunit:**

Forms part of the preprotein translocase complex of the outer mitochondrial membrane (TOM complex).

## Subcellular Location:

Mitochondrion outer membrane.

## Similarity:

Belongs to the Tom20 family.

## SWISS:

Q15388

### Gene ID:

9804

#### Database links:

Entrez Gene: 67952Mouse

Entrez Gene: 266601Rat

Omim: 601848Human

SwissProt: Q15388Human

SwissProt: Q9DCC8Mouse

SwissProt: Q62760Rat

Unigene: 533192Human

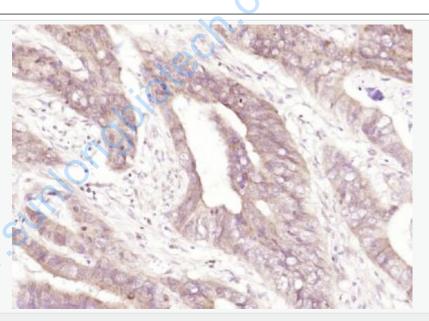
Unigene: 380026Mouse

Unigene: 6932Mouse

Unigene: 2143Rat

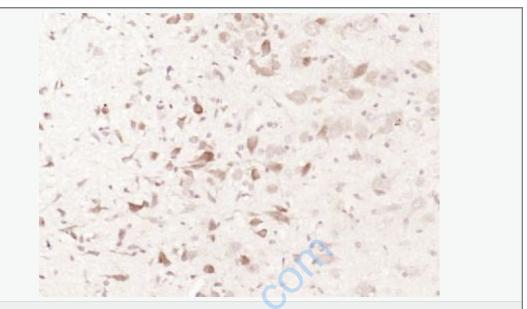
## **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



## Picture:

Paraformaldehyde-fixed, paraffin embedded (human rectal carcinoma); 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 (TOMM20) Polyclonal Antibody, Unconjugated (SL22121R) 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 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 (TOMM20) Polyclonal Antibody, Unconjugated (SL22121R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.