# TOM20 Rabbit monoclonal antibody

Catalog: MB66394 Host: Rabbit Reactivity: Human, Hamster

## BackGround:

Mitochondria play a central role in cellular energy metabolism and are essential organelles in eukaryotes. In humans, 13 proteins are encoded by the mitochondrial genome while the vast majority of mitochondrial proteins are encoded by the nuclear genome. As a result, most mitochondrial proteins are synthesized as precursors in the cytoplasm and imported across mitochondrial membranes by one or more translocase protein complexes . The translocase of the outer mitochondrial membrane (TOM complex) facilitates the import of proteins through the outer mitochondrial membrane, while the complementary translocase of the inner membrane (TIM complex) is responsible for protein transport to the mitochondrial matrix. The TOM complex consists of the receptors TOM20, TOM22, TOM70, and the channel-forming protein TOM40 . TOM20 is localized in the outer mitochondrial membrane and initially recognizes precursors with a presequence to facilitate protein import across the outer mitochondrial membrane . In a sequential process, recognition of the presequence by TOM20 is followed by tethering of the presequence to the TOM40 protein complex for efficient protein import .

## Product:

Liquid in 50mM Tris-Glycine (pH 7.4), 0.15M NaCl, 50% Glycerol, 0.01% Sodium azide and 0.05% BSA.

## Molecular Weight:

~ 16 kDa

## Swiss-Prot:

Q15388

## Purification&Purity:

The antibody was purified by immunogen affinity chromatography.

## Applications:

WB (1/500 - 1/1000), IHC (1/50 - 1/100), IF/ICC (1/50 - 1/100)

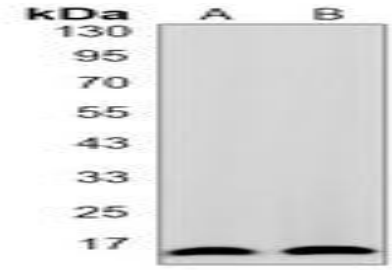
## Storage&Stability:

Store at 4℃ short term. Aliquot and store at -20℃ long term. Avoid freeze-thaw cycles.

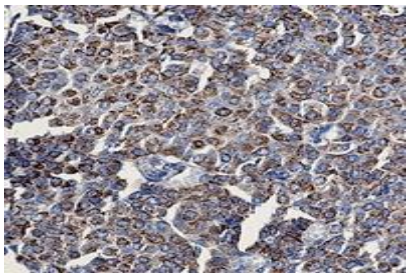
## Specificity:

Recognizes endogenous levels of TOM20 protein.

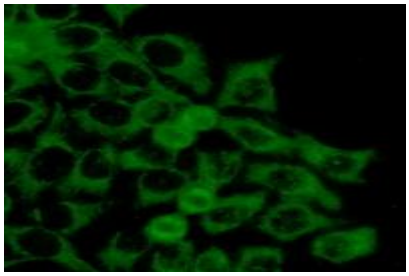
## DATA:




Western blot analysis of TOM20 expression in Hela (A), CHOK1 (B) whole cell lysates.



Immunohistochemical analysis of TOM20 staining in human breast carcinoma formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.17). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



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Immunofluorescent analysis of TOM20 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 ℃ in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark.

**Note:**

For research use only, not for use in diagnostic procedure.

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