Tom70 (A-8): sc-390545

**BACKGROUND**

The mitochondrial protein translocase (MPT) shuttles preproteins into the mitochondria via recognition of an amino-terminal signal sequence (presequence) or an internal targeting domain within the preprotein. MPT contains several components that form three translocons, one in the outer membrane (Tom40/70) and two in the inner membrane (Tim17/23 and Tim22/54). The integral membrane proteins of the MPT include Tom70, Tom37, Tom22 and Tom20. MPT-dependent transport delivers the substrate protein to an outer membrane channel consisting of five hydrophobic proteins, Tom40, Tom38, Tom7, Tom6 and Tom5. The human Tom70 gene maps to chromosome 3q12.2.

**CHROMOSOMAL LOCATION**

Genetic locus: TOMM70 (human) mapping to 3q12.2; Tom70a (mouse) mapping to 16 C1.1.

**SOURCE**

Tom70 (A-8) is a mouse monoclonal antibody raised against amino acids 492-608 mapping at the C-terminus of Tom70 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG_, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Tom70 (A-8) is available conjugated to agarose (sc-390545 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390545 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390545 PE), fluorescein (sc-390545 FITC), Alexa Fluor® 488 (sc-390545 AF488), Alexa Fluor® 546 (sc-390545 AF546), Alexa Fluor® 594 (sc-390545 AF594) or Alexa Fluor® 647 (sc-390545 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390545 AF680) or Alexa Fluor® 790 (sc-390545 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

Tom70 (A-8) is recommended for detection of Tom70 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Tom70 (A-8) is also recommended for detection of Tom70 in additional species, including equine and canine.

Suitable for use as control antibody for Tom70 siRNA (h): sc-106627, Tom70 siRNA (m): sc-154554, Tom70 shRNA Plasmid (h): sc-106627-SH, Tom70 shRNA Plasmid (m): sc-154554-SH, Tom70 shRNA (h) Lentiviral Particles: sc-106627-V and Tom70 shRNA (m) Lentiviral Particles: sc-154554-V.

Molecular Weight of Tom70: 70 kDa.

Positive Controls: Caco-2 cell lysate: sc-2262, A-10 cell lysate: sc-3806 or HL-60 whole cell lysate: sc-2209.

**DATA**

**STORAGE**

Store at 4° C, **NOTE** FREEZE***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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