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 5 hydrophobic proteins, Tom40, Tom38, Tom7, Tom6 and Tom5. The human Tom70 gene maps to chromosome 3q12.2.

CHROMOSOMAL LOCATION
Genetic locus: TOMM70A (human) mapping to 3q12.2; Tomm70a (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 IgG1 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 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.

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.

STORAGE
Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA

SELECT PRODUCT CITATIONS

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

PROTOCOLS
See our web site at www.scbt.com for detailed protocols and support products.