**BACKGROUND**

MER3, also known as HFM1, Si-11 or SEC3D1 (SEC63 domain-containing protein 1), is a 1,435 amino acid protein that belongs to the helicase family and SKI2 subfamily. MER3 catalyzes the conversion of ATP to ADP, and contains one helicase ATP-binding domain, a helicase C-terminal domain and a single SEC63 domain. Existing as two alternatively spliced isoforms, MER3 is expressed in testis and ovary and is encoded by a gene that maps to human chromosome 1p22.2. Human chromosome 1 spans 260 million base pairs, contains over 3,000 genes, comprises nearly 8% of the human genome and houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson’s disease, Gaucher disease, schizophrenia and Usher syndrome.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: HFM1 (human) mapping to 1p22.2.

**SOURCE**

MER3 (C-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 838-859 within an internal region of MER3 of human origin.

**PRODUCT**

Each vial contains 200 µg IgM in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-514597 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

MER3 (C-8) is recommended for detection of MER3 of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:300).

Suitable for use as control antibody for MER3 siRNA (h): sc-88755, MER3 shRNA Plasmid (h): sc-88755-SH and MER3 shRNA (h) Lentiviral Particles: sc-86755-V.

Molecular Weight of MER3 isoforms: 163/63 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, MDA-MB-231 cell lysate: sc-2232 or OV-90 whole cell lysate: sc-364191.

**DATA**

MER3 (C-8) sc-514597. Western blot analysis of MER3 expression in Jurkat (A), MDA-MB-231 (B) and OV-90 (C) whole cell lysates and human testis tissue extract (D).

**STORAGE**

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

**RESEARCH USE**

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

**PROTOCOLS**

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