

MFG-E8 (M-135): sc-33546

BACKGROUND

Human milk-fat globule (MFG) is abundant in human breast milk and is composed of secreted lipids encapsulated by plasma membranes from the epithelial cells of mammary glands. MFG membranes are composed of various glycoproteins that serve as markers for differentiated carcinomas. MFG-E8 (milk fat globule-EGF factor 8), also known as Lactadherin or BA46, is a 387 amino acid peripheral membrane protein that localizes to the membrane of a variety of tissues, including mammary epithelial surfaces, and contains one EGF-like domain and 2 F5/8 type C domains. Functioning as a specific ligand for Integrin $\beta 5$ and Integrin $\beta 3$, MFG-E8 is thought to be involved in gamete interactions and cell attachment, possibly playing a role in fertilization and apoptosis. Additionally, MFG-E8 binds to rotavirus and inhibits its replication, thereby protecting the cell from viral infection. Overexpression of MFG-E8 is associated with breast cancer, suggesting that MFG-E8 may be related to tumorigenesis.

CHROMOSOMAL LOCATION

Genetic locus: Mfge8 (mouse) mapping to 7 D3.

SOURCE

MFG-E8 (M-135) is a rabbit polyclonal antibody raised against amino acids 56-190 mapping near the N-terminus of MFG-E8 of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

MFG-E8 (M-135) is recommended for detection of MFG-E8 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 1:30-1:3000).

Suitable for use as control antibody for MFG-E8 siRNA (m): sc-43159, MFG-E8 siRNA (r): sc-61893, MFG-E8 shRNA Plasmid (m): sc-43159-SH, MFG-E8 shRNA Plasmid (r): sc-61893-SH, MFG-E8 shRNA (m) Lentiviral Particles: sc-43159-V and MFG-E8 shRNA (r) Lentiviral Particles: sc-61893-V.

Molecular Weight of MFG-E8: 46 kDa.

Positive Controls: MFG-E8 (m3): 293T lysate: sc-127151 or CSMLO whole cell lysate: sc-364369.

RESEARCH USE

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

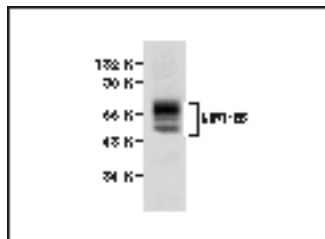
PROTOCOLS

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

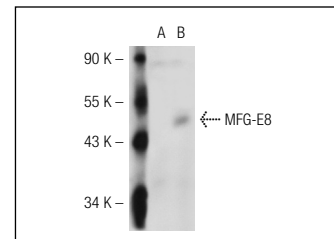
STORAGE

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

DATA



MFG-E8 (M-135): sc-33546. Western blot analysis of MFG-E8 expression in CSMLO whole cell lysate.



MFG-E8 (M-135): sc-33546. Western blot analysis of MFG-E8 expression in non-transfected: sc-117752 (A) and mouse MFG-E8 transfected: sc-127151 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Miksa, M., et al. 2006. Dendritic cell-derived exosomes containing milk fat globule epidermal growth factor-factor VIII attenuate proinflammatory responses in sepsis. *Shock* 25: 586-593.
- Conde-Vancells, J., et al. 2008. Characterization and comprehensive proteome profiling of exosomes secreted by hepatocytes. *J. Proteome Res.* 7: 5157-5166.
- Fan, Y., et al. 2009. Ferritin expression in rat hepatocytes and kupffer cells after lead nitrate treatment. *Toxicol. Pathol.* 37: 209-217.
- Wang, M., et al. 2010. Proteomic profiling of cellular responses to carvedilol enantiomers in vascular smooth muscle cells by iTRAQ-coupled 2-D LC-MS/MS. *J. Proteomics* 73: 1601-1611.
- Angel, P.M., et al. 2011. Networked-based characterization of extracellular matrix proteins from adult mouse pulmonary and aortic valves. *J. Proteome Res.* 10: 812-823.

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Try **MFG-E8 (H-3): sc-377356**, our highly recommended monoclonal alternative to MFG-E8 (M-135).