For Research Use Only

MIST1 Monoclonal antibody

Catalog Number: 68092-1-Ig



Basic Information

Catalog Number:

68092-1-lg Size: 1000 µg/ml

Source: Mouse Isotype:

IgG2a member a 15

Immunogen Catalog Number:

AG18509

GenBank Accession Number:

BC113394 GeneID (NCBI): 168620 **UNIPROT ID:** Q7RTS1

basic helix-loop-helix family,

Calculated MW: 189 aa, 21 kDa Observed MW:

27 kDa

Full Name:

Purification Method: Protein A purification

CloneNo.: 1E10B3

Recommended Dilutions: WB 1:2000-1:10000

Applications

Tested Applications: WB, ELISA

Species Specificity: Human, Pig, Rat, Mouse Positive Controls:

WB: BxPC-3 cells, SW 1990 cells, Pig pancreas tissue,

Rat pancreas tissue

Background Information

Muscle intestine stomach expression 1 (MIST1), also named bHLHa15, is a secretory cell transcription factor that belongs to the basic helix-loop-helix superfamily. MIST1 is mainly expressed in serous secreted cells and essential for the development and maturation of secretory cells. Secretory cells lacking MIST1 exhibit structural and functional defects, including alterations in cytoskeletal organization and cell polarity and improper cell-cell junction. In healthy pancreata, MIST1 facilitates cell-to-cell communication, promotes acinar cell polarity, controls Ca2+ flux, promotes unfolded protein response (UPR) homeostasis, aids in vesicle assembly, and is required for regulated exocytosis. MIST1 was downregulated in pancreatic cancer tissues compared with normal or adjacent pancreatic tissues and lower MIST1 expression in pancreatic cancer cell lines than normal acinar cells (BxPC-3, PANC-1, SW 1990) (PMID:29859299). MIST1 is downregulated in the development of gastric cancer and in gastric cancer cells compared with SW620 cells (PMID:34149921).

Storage

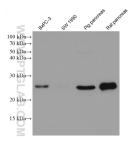
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68092-1-1g (MIST1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.