

#14896 Store at -20°C

MIST1/bHLHa15 (D7N4B) XP® Rabbit mAb


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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IHC-P	H M	Endogenous	23	Rabbit IgG	#Q7RTS1	168620

Product Usage Information	Application Western Blotting Immunohistochemistry (Paraffin)	Dilution 1:1000 1:100
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.	
Specificity / Sensitivity	MIST1/bHLHa15 (D7N4B) XP® Rabbit mAb recognizes endogenous levels of total MIST1/bHLHa15 protein.	
Species predicted to react based on 100% sequence homology:	Rat	
Source / Purification	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gln181 of human MIST1/bHLHa15 protein.	
Background	Class A basic helix-loop-helix protein 15 (MIST1, bHLHa15) is a highly conserved basic helix loop helix family transcription factor that binds E-box motifs and regulates the expression of developmentally regulated genes (1). MIST1 can bind DNA as a homodimer, or may heterodimerize with other bHLH proteins to regulate target gene expression (1). MIST1 is expressed in an array of tissues, including salivary glands, stomach, small intestine, and the pancreas, but is generally restricted to secretory cell subtypes (2). In the pancreas, MIST1 is essential for the maturation, maintenance, and function of acinar cells (3). In gastric chief cells, MIST1 regulates the expression of RAB26 and RAB3D, two GTPases that function to regulate secretory granule formation (4). Loss of MIST1 in gastric chief cells may be a potential marker of gastric epithelial neoplasia (5).	
Background References	1. Lemerrier, C. et al. (1997) <i>Dev Biol</i> 182, 101-13. 2. Pin, C.L. et al. (2000) <i>Anat Rec</i> 259, 157-67. 3. Pin, C.L. et al. (2001) <i>J Cell Biol</i> 155, 519-30. 4. Tian, X. et al. (2010) <i>Mol Cell Biol</i> 30, 1269-84. 5. Lennerz, J.K. et al. (2010) <i>Am J Pathol</i> 177, 1514-33.	

Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
Western Blot Buffer	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
Applications Key	WB: Western Blotting IHC-P: Immunohistochemistry (Paraffin)
Cross-Reactivity Key	H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse GP: Guinea Pig Rab: rabbit All: all species expected

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