

MSL1 Rabbit pAb

Catalog # AP98161

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q68DK7
Other Accession	Q68DK7
Predicted	Rat, Pig, Human, Mouse, Rabbit, Chicken, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	67128
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human MSL1
Epitope Specificity	321-420/614
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the msl-1 family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Component of histone acetyltransferase complex responsible for the majority of histone H4 acetylation at 'Lys-16' which is implicated in the formation of higher-order chromatin structure.

Additional Information

Gene ID	339287
Other Names	MSL-1; MSL1_HUMAN; MSL1; Male-specific lethal 1-like 1 (MSL1-like 1); Male-specific lethal-1 homolog 1; MSL1L1; MSL complex subunit 1; male-specific lethal 1 homolog (Drosophila)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:500 0-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	MSL1 {ECO:0000303 PubMed:16227571, ECO:0000312 HGNC:HGNC:27905}
Function	Non-catalytic component of the MSL histone acetyltransferase complex, a multiprotein complex that mediates the majority of histone H4 acetylation at

'Lys-16' (H4K16ac), an epigenetic mark that prevents chromatin compaction (PubMed:[16227571](#), PubMed:[16543150](#), PubMed:[33837287](#)). The MSL complex is required for chromosome stability and genome integrity by maintaining homeostatic levels of H4K16ac (PubMed:[33837287](#)). The MSL complex is also involved in gene dosage by promoting up-regulation of genes expressed by the X chromosome (By similarity). X up-regulation is required to compensate for autosomal biallelic expression (By similarity). The MSL complex also participates in gene dosage compensation by promoting expression of Tsix non-coding RNA (By similarity). Within the MSL complex, acts as a scaffold to tether MSL3 and KAT8 together for enzymatic activity regulation (PubMed:[22547026](#)). Greatly enhances MSL2 E3 ubiquitin ligase activity, promoting monoubiquitination of histone H2B at 'Lys-34' (H2BK34Ub) (PubMed:[21726816](#), PubMed:[30930284](#)). This modification in turn stimulates histone H3 methylation at 'Lys-4' (H3K4me) and 'Lys-79' (H3K79me) and leads to gene activation, including that of HOXA9 and MEIS1 (PubMed:[21726816](#)).

Cellular Location

Nucleus. Nucleus, nucleoplasm {ECO:0000250|UniProtKB:Q6PDM1}. Nucleus speckle {ECO:0000250|UniProtKB:Q6PDM1}

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.