Revision 4

#37849 Store at -20C

MX1 (D3W7I) Rabbit mAb

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP, IHC-Bond, IHC-P	H	Endogenous	76	Rabbit IgG	#P20591	4599

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50
IHC Leica Bond	1:200
Immunohistochemistry (Paraffin)	1:160

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.*

For a carrier free (BSA and azide free) version of this product see product #62815.

Specificity / Sensitivity

MX1 (D3W7I) Rabbit mAb recognizes endogenous levels of total MX1 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu292 of human MX1 protein.

Background

MX1 (Myxovirus resistance protein 1/MxA) is an interferon-inducible antiviral protein that confers resistance to RNA viruses (1-4). MX1 has GTPase activity, and GTP-bound MX1 adopts a conformation that enables interaction with viral nucleocapsids (5-7). This interaction blocks transport of viral nucleocapsids to the nucleus, which prevents transcription of the viral genome (7,8). Structural studies suggest that the antiviral activity of MX1 involves the formation of MX1 oligomeric rings around viral nucleocapsids (9-12).

Background References

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2. Staeheli, P. et al. (1985) *J Biol Chem* 260, 1821-5.
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4. Staeheli, P. et al. (1986) *Cell* 44, 147-58.
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6. Kochs, G. and Haller, O. (1999) *J Biol Chem* 274, 4370-6.
7. Kochs, G. and Haller, O. (1999) *Proc Natl Acad Sci U S A* 96, 2082-6.
8. Kochs, G. et al. (2002) *Proc Natl Acad Sci U S A* 99, 3153-8.
9. Kochs, G. et al. (2002) *J Biol Chem* 277, 14172-6.
10. Gao, S. et al. (2010) *Nature* 465, 502-6.
11. Haller, O. et al. (2010) *J Biol Chem* 285, 28419-24.
12. Gao, S. et al. (2011) *Immunity* 35, 514-25.

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 **IP:** Immunoprecipitation **IHC-Bond:** IHC Leica Bond
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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