

Dom3z antibody - N-terminal region

Rabbit Polyclonal Antibody

Catalog # AI13365

Product Information

Application	WB
Primary Accession	Q6MG77
Other Accession	NM_212497 , NP_997662
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Pig, Dog, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	45299

Additional Information

Gene ID	361799
Alias Symbol	MGC95256
Other Names	Decapping and exoribonuclease protein, DXO, 3.1.13.-, 3.6.1.-, Dom-3 homolog Z, Dxo, Dom3z
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Dom3z antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Dom3z antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Dxo {ECO:0000312 RGD:1303267}
Function	Decapping enzyme for NAD-capped RNAs: specifically hydrolyzes the nicotinamide adenine dinucleotide (NAD) cap from a subset of RNAs by removing the entire NAD moiety from the 5'-end of an NAD-capped RNA. The NAD-cap is present at the 5'-end of some RNAs and snoRNAs. In contrast to the canonical 5'-end N7 methylguanosine (m7G) cap, the NAD cap promotes mRNA decay (By similarity). Preferentially acts on NAD- capped transcripts in response to environmental stress (By similarity). Also acts as a non-canonical decapping enzyme that removes the entire cap structure of m7G capped or incompletely capped RNAs and mediates their subsequent degradation. Specifically degrades pre-mRNAs with a defective 5'-end m7G cap and is part

of a pre-mRNA capping quality control. Has decapping activity toward incomplete 5'-end m7G cap mRNAs such as unmethylated 5'-end-capped RNA (cap0), while it has no activity toward 2'-O-ribose methylated m7G cap (cap1). In contrast to canonical decapping enzymes DCP2 and NUDT16, which cleave the cap within the triphosphate linkage, the decapping activity releases the entire cap structure GpppN and a 5'-end monophosphate RNA. Also has 5'-3' exoribonuclease activities: The 5'-end monophosphate RNA is then degraded by the 5'-3' exoribonuclease activity, enabling this enzyme to decap and degrade incompletely capped mRNAs. Also possesses RNA 5'-pyrophosphohydrolase activity by hydrolyzing the 5'-end triphosphate to release pyrophosphates (By similarity). Exhibits decapping activity towards FAD-capped RNAs (By similarity). Exhibits decapping activity towards dpCoA-capped RNAs in vitro (By similarity).

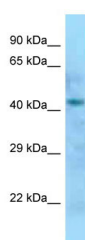
Cellular Location

Nucleus {ECO:0000250|UniProtKB:O77932}.

References

Hurt P.,et al.Genome Res. 14:631-639(2004).

Images



WB Suggested Anti-Dom3z Antibody Titration: 1.0 µg/ml
Positive Control: Rat Liver

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