

DOM3Z Antibody (N-term Y88)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6635a

Specification

DOM3Z Antibody (N-term Y88) - Product Information

Application WB, FC,E
Primary Accession 077932

Other Accession Q6MG77, Q70348, Q5E9Y5

Reactivity Human

Predicted Bovine, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 44929
Antigen Region 73-99

DOM3Z Antibody (N-term Y88) - Additional Information

Gene ID 1797

Other Names

Decapping and exoribonuclease protein, DXO, 3113-, 361-, Dom-3 homolog Z, DXO, DOM3L, DOM3Z, NG6

Target/Specificity

This DOM3Z antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 73-99 amino acids from the N-terminal region of human DOM3Z.

Dilution

WB~~1:1000 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

DOM3Z Antibody (N-term Y88) is for research use only and not for use in diagnostic or therapeutic procedures.

DOM3Z Antibody (N-term Y88) - Protein Information

Name DXO {ECO:0000303|PubMed:29601584, ECO:0000312|HGNC:HGNC:2992}



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 (PubMed:28283058). The NAD-cap is present at the 5'-end of some RNAs and snoRNAs (PubMed:28283058). In contrast to the canonical 5'-end N7 methylguanosine (m7G) cap, the NAD cap promotes mRNA decay (PubMed: 28283058). Preferentially acts on NAD-capped transcripts in response to environmental stress (PubMed:31101919). 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 (By similarity). Specifically degrades pre-mRNAs with a defective 5'-end m7G cap and is part of a pre-mRNA capping quality control (By similarity). 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) (PubMed: 29601584). 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 (By similarity). 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 (PubMed: 29601584). Also possesses RNA 5'pyrophosphohydrolase activity by hydrolyzing the 5'-end triphosphate to release pyrophosphates (By similarity). Exhibits decapping activity towards FAD-capped RNAs (PubMed:32374864). Exhibits decapping activity towards dpCoA-capped RNAs in vitro (By similarity).

Cellular LocationNucleus

Tissue LocationUbiquitously expressed.

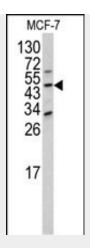
DOM3Z Antibody (N-term Y88) - Protocols

Provided below are standard protocols that you may find useful for product applications.

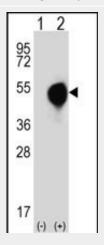
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

DOM3Z Antibody (N-term Y88) - Images

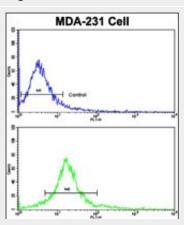




Western blot analysis of DOM3Z antibody (N-term Y88) (Cat. #AP6635a) in MCF-7 cell line lysates (35ug/lane). DOM3Z (arrow) was detected using the purified Pab.



Western blot analysis of DOM3Z (arrow) using rabbit polyclonal DOM3Z Antibody (N-term Y88) (Cat. #AP6635a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the DOM3Z gene.



Flow cytometric analysis of MDA-231 cells using DOM3Z Antibody (N-term Y88)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

DOM3Z Antibody (N-term Y88) - Background

The function of DOM3Z is unknown, but its ubiquitous expression and conservation in both simple and complex eukaryotes suggests that its gene may be a housekeeping gene.





DOM3Z Antibody (N-term Y88) - References

Lehner, B., Genome Res. 14 (7), 1315-1323 (2004)