

WDR4 Rabbit mAb

Catalog # AP78473

Product Information

Application	WB, IHC-P, IF, FC, ICC
Primary Accession	P57081
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Immunogen	A synthesized peptide derived from human WDR4
Purification	Affinity Purified
Calculated MW	45490

Additional Information

Gene ID	10785
Other Names	WDR4
Dilution	WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 FC~~1:10~50 ICC~~N/A
Format	Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

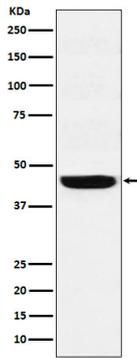
Name	WDR4
Function	Non-catalytic component of the METTL1-WDR4 methyltransferase complex required for the formation of N(7)-methylguanine in a subset of RNA species, such as tRNAs, mRNAs and microRNAs (miRNAs) (PubMed: 12403464 , PubMed: 31031083 , PubMed: 31031084 , PubMed: 36599982 , PubMed: 36599985 , PubMed: 37369656). In the METTL1-WDR4 methyltransferase complex, WDR4 acts as a scaffold for tRNA-binding (PubMed: 36599982 , PubMed: 36599985 , PubMed: 37369656). Required for the formation of N(7)- methylguanine at position 46 (m7G46) in a large subset of tRNAs that contain the 5'-RAGGU-3' motif within the variable loop (PubMed: 12403464 , PubMed: 34352206 , PubMed: 34352207 , PubMed: 36599982 , PubMed: 36599985 , PubMed: 37369656). M7G46 interacts with C13-G22 in the D-loop to stabilize tRNA tertiary structure and protect tRNAs from decay (PubMed: 36599982 , PubMed: 36599985). Also required for the formation of N(7)-methylguanine at internal sites in a subset of mRNAs

(PubMed:[31031084](#), PubMed:[37379838](#)). Also required for methylation of a specific subset of miRNAs, such as let-7 (PubMed:[31031083](#)). Independently of METTL1, also plays a role in genome stability: localizes at the DNA replication site and regulates endonucleolytic activities of FEN1 (PubMed:[26751069](#)).

Cellular Location

Nucleus. Chromosome Note=Localizes at the site of nascent DNA synthesis

Images



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