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Anti-WDR4 Rabbit Monoclonal Antibody

Catalog # ABO16008

Product Information

Application	WB, IHC, IF, ICC, FC
Primary Accession	P57081
Host	Rabbit
Isotype	IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid
Description	Anti-WDR4 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human.

Additional Information

Gene ID	10785
Other Names	tRNA (guanine-N(7)-)-methyltransferase non-catalytic subunit WDR4 {ECO:0000255|HAMAP-Rule:MF_03056}, Protein Wuho homolog, hWH, WD repeat-containing protein 4 {ECO:0000255|HAMAP-Rule:MF_03056}, WDR4
Calculated MW	45490
Application Details	WB 1:500-1:2000 IHC 1:50-1:200 ICC/IF 1:50-1:200 FC 1:50
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: 25W87
Immunogen	A synthesized peptide derived from human WDR4
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

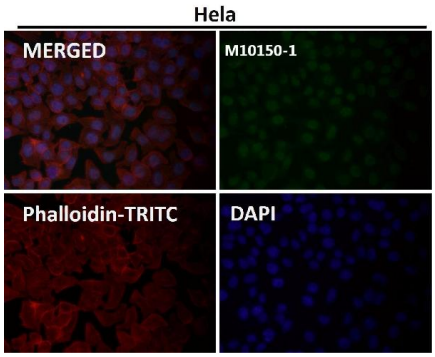
Protein Information

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



Immunofluorescent analysis using the Antibody at 1:50 dilution.

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