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WDR77 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52808

Product Information

Application	WB, ICC
Primary Accession	Q9BQA1
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	36724

Additional Information

Gene ID	79084
Other Names	2610312E17Rik;Androgen receptor cofactor p44;C79984;HKMT1069;MEP 50;MEP-50;MEP50; MEP50_HUMAN;Methylosome protein 50;MGC2722;Nbla10071;p44;p44/Mep50;RGD1310479;RP11 552M11.3;WD repeat containing protein 77;WD repeat domain 77;WD repeat-containing protein 77;WDR77.
Dilution	WB~~1:1000 ICC~~1:100
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	WDR77 (HGNC:29652)
Function	Non-catalytic component of the methylosome complex, composed of PRMT5, WDR77 and CLNS1A, which modifies specific arginines to dimethylarginines in several spliceosomal Sm proteins and histones (PubMed:11756452). This modification targets Sm proteins to the survival of motor neurons (SMN) complex for assembly into small nuclear ribonucleoprotein core particles. Might play a role in transcription regulation. The methylosome complex also methylates the Piwi proteins (PIWIL1, PIWIL2 and PIWIL4), methylation of Piwi proteins being required for the interaction with Tudor domain-containing proteins and subsequent localization to the meiotic nuage (PubMed:23071334). Nucleus. Cytoplasm. Note=Nuclear in Leydig cells and cytoplasmic in germ

Cellular Location	cells during fetal testicular development. In adult testis, predominantly nuclear. Subcellular location varies from nuclear to cytoplasmic in various tumors (PubMed:17437848).
Tissue Location	Highly expressed in heart, skeletal muscle, spleen, testis, uterus, prostate and thymus. In testis, expressed in germ cells and Leydig cells, but not in peritubular myocytes, nor in Sertoli cells. Expressed in prostate cancers, in seminomas and in Leydig cell tumors.

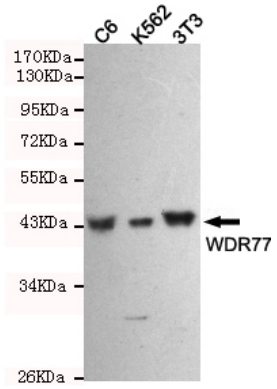
Background

Non-catalytic component of the 20S PRMT5-containing methyltransferase complex, which modifies specific arginines to dimethylarginines in several spliceosomal Sm proteins and histones. This modification targets Sm proteins to the survival of motor neurons (SMN) complex for assembly into small nuclear ribonucleoprotein core particles. Might play a role in transcription regulation. The 20S PRMT5-containing methyltransferase complex also methylates the Piwi proteins (PIWIL1, PIWIL2 and PIWIL4), methylation of Piwi proteins being required for the interaction with Tudor domain-containing proteins and subsequent localization to the meiotic nuage.

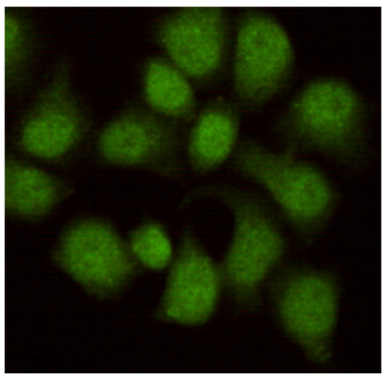
References

Friesen W.J.,et al.J. Biol. Chem. 277:8243-8247(2002).
Hosohata K.,et al.Mol. Cell. Biol. 23:7019-7029(2003).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Yamada S.,et al.Oncogene 23:5901-5911(2004).
Gregory S.G.,et al.Nature 441:315-321(2006).

Images



Western blot detection of WDR77 in C6,3T3 and K562 cell lysates using WDR77 mouse mAb (1:1000 diluted).Predicted band size:42KDa.Observed band size:42KDa.



Immunocytochemistry staining of HeLa cells fixed in 1% Paraformaldehyde and then permeabilized in 0.1% Triton X-100,next using WDR77 mouse mAb (dilution 1:100).