## For Research Use Only

## NSD3 Recombinant antibody

Catalog Number:83116-2-RR

Featured Product



**Basic Information** 

Catalog Number: 83116-2-RR Concentration: 1000 ug/ml Source:

**UNIPROT ID:** Rabbit Q9BZ95 Full Name: Isotype:

Immunogen Catalog Number:

AG1894 Calculated MW:

1437 aa. 162 kDa Observed MW:

160-170 kDa, 68-72 kDa

GenBank Accession Number:

BC012059

54904

1-like 1

GeneID (NCBI):

**Purification Method:** 

Protein A purification CloneNo.: 230499C2

Recommended Dilutions: WB: 1:5000-1:50000 IHC: 1:200-1:800 Wolf-Hirschhorn syndrome candidate IF/ICC: 1:500-1:2000

FC (Intra): 0.40 ug per 10^6 cells in a

100 µl suspension

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, FC (Intra), ELISA

Species Specificity:

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: A549 cells, HEK-293 cells, HeLa cells, K-562 cells IHC: human lung squamous cell carcinoma tissue,

IF/ICC: A549 cells, FC (Intra): HeLa cells,

## **Background Information**

WHSC1L1, also named as NSD3 and DC28, belongs to the histone-lysine methyltransferase family and SET2 subfamily. It is histone methyltransferase. WHSC1L1 is a potently transforming oncogenes based on the number of altered phenotypes expressed by the cells. It contains a PWWP-domain that is a methyl-lysine recognition motif involved in histone code modification and epigenetic regulation of gene expression. Knockdown of WHSC1L1 in 8p11-12-amplified breast cancer cells resulted in profound loss of growth and survival of these cells. (PMID: 20940404). This antibody recognize the long isoform (160-170 kDa) and short isoform (68-72 kDa).

Storage

Storage:

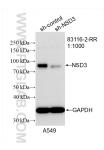
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

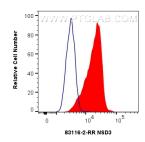
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

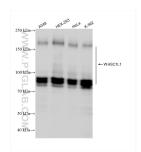
## Selected Validation Data



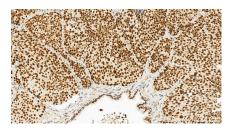
WB result of NSD3 antibody (83116-2-RR; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-NSD3 transfected A549 cells.



1x10^6 HeLa cells were intracellularly stained with 0.4 ug NSD3 Recombinant antibody (83116-2-RR, Clone:230499C2) and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2) (red), or 0.4 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).

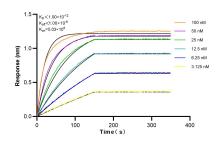


Various lysates were subjected to SDS PAGE followed by western blot with 83116-2-RR (WHSC 1L1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human lung squamous cell carcinoma tissue slide using 83116-2-RR (NSD3 antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Immunofluorescent analysis of (4% PFA) fixed A549 cells using NSD3 antibody (83116-2-RR, Clone: 230499C2) at dilution of 1:1000 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



Biolayer interferometry (BLI) kinetic assays of 83116-2-RR against Human NSD3 were performed. The affinity constant is below 1 pM.