For Research Use Only

NSD3 Recombinant antibody, PBS Only (Capture)

Catalog Number:83116-2-PBS



Purification Method:

CloneNo.:

230499C2

Protein A purification

Basic Information

Catalog Number: GenBank Accession Number:

83116-2-PBS BC012059

Size: GeneID (NCBI): 100ug, Concentration: 1mg/ml by 54904

Nanodrop; UNIPROT ID:
Source: Q9BZ95
Rabbit Full Name:

Isotype: Wolf-Hirschhorn syndrome candidate

IgG 1-like 1

Immunogen Catalog Number: Calculated MW:
AG1894 1437 aa, 162 kDa
Observed MW:

160-170 kDa, 68-72 kDa

Applications

Tested Applications:

WB, IHC, FC (Intra), Cytometric bead array, Sandwich

ELISA, Indirect ELISA, Sample test

Species Specificity:

human

Product Information

83116-2-PBS targets NSD3 as part of a matched antibody pair:

MP00189-2: 83116-2-PBS capture and 83116-4-PBS detection (validated in Cytometric bead array)

MP00189-4: 83116-2-PBS capture and 83116-5-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

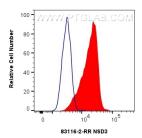
Background Information

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).

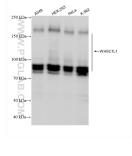
Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

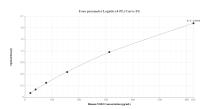
Selected Validation Data



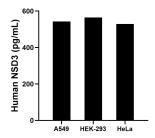
1x10^6 HeLa cells were intracellularly stained with 0.4 ug NSD3 Recombinant antibody (83116-2-RR, Clone:230499C2) and CoraLite® 488-Conjugated AfrinPure Goat Anti-Rabbit IgG(H+L) (SA00013-2) (red), or 0.4 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 83116-2-PBS in a different storage buffer formulation.



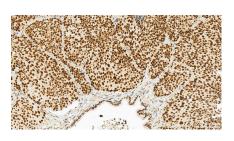
Various lysates were subjected to SDS PAGE followed by western blot with 83116-2-RR (WHSC1L1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83116-2-PBS in a different storage buffer formulation.



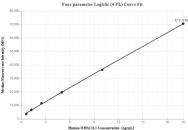
Sandwich ELISA standard curve of MP00189-4, Human NSD3 Recombinant Matched Antibody Pair-PBS only. 83116-2-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag1894. 83116-5-PBS was HRP conjugated as the detection antibody. Range: 19.5-625 pg/mL



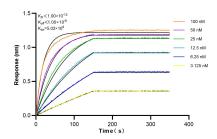
The mean NSD3 concentration was determined to be 542.5 pg/mL in A549 cell extract based on a 1.0 mg/mL extract load, 565.1 pg/mL in HEK-293 cell extract based on a 1.2 mg/mL extract load and 529.6 pg/mL in HeLa cell extract based on a 1.5 mg/mL extract load.



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). This data was developed using the same antibody clone with 83116-2-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00189-2, WHSC 1L1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83116-2-PBS. Detection antibody: 83116-4-PBS. Standard: Ag1894. Range: 0.625-20 ng/mL.



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