

Rabbit SETD2 Polyclonal Antibody | anti-SETD2 antibody

Phospho-SETD2 (Ser532) Antibody

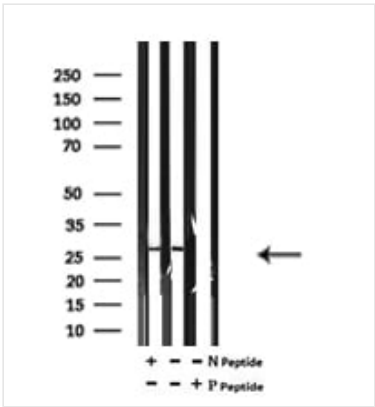
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA328253	Rabbit	Human, Mouse, RatPredicted: Pig, Bovine, Horse, Sheep, Dog	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

SETD2; Polyclonal Antibody; Phospho-SETD2 (Ser532) Antibody; EC 2.1.1.43; FLJ16420; FLJ22472; FLJ23184; FLJ45883; HBP231; HIF 1; HIF-1; HIF1; HIP-1; Histone lysine N methyltransferase SETD2; Histone-lysine N-methyltransferase SETD2; hSET2; HSPC069; Huntingtin interacting protein 1; Huntingtin interacting protein; Huntingtin interacting protein B; Huntingtin interacting protein HYPB; Huntingtin yeast partner B; Huntingtin-binding protein; 231-KD; Huntingtin-interacting protein 1; Huntingtin-interacting protein B; HYPB; KIAA1732; KMT3A; Lysine N methyltransferase 3A; Lysine N-methyltransferase 3A; p231HBP; SET domain containing 2; SET domain-containing protein 2; SET2; SETD2_HUMAN; anti-SETD2 antibody

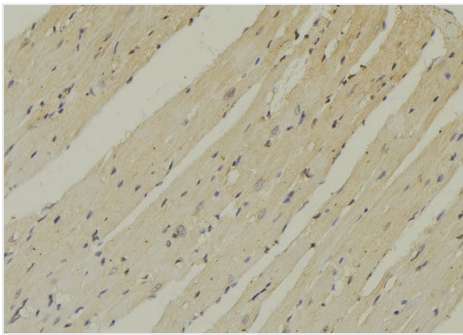
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted: Pig, Bovine, Horse, Sheep, Dog
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-SETD2(Ser532) Antibody detects endogenous levels of SETD2 only when phosphorylated at Ser532.
Purity/Purification	Purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Form/Format	Liquid; Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	2564
Applicable Applications for anti-SETD2 antibody	ELISA (Peptide ELISA), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human SETD2 around the phosphorylation site of Ser532.
Tissue Specificity	Ubiquitously expressed.
Subcellular Location	Nucleus
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



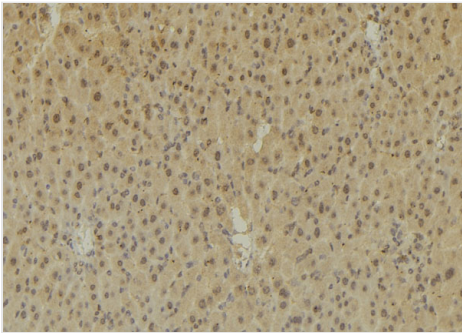
WB (Western Blot)

Western blot analysis of Phospho-SETD2(Ser532) in lysates of HeLa cells, using Phospho-SETD2(Ser532) Antibody.



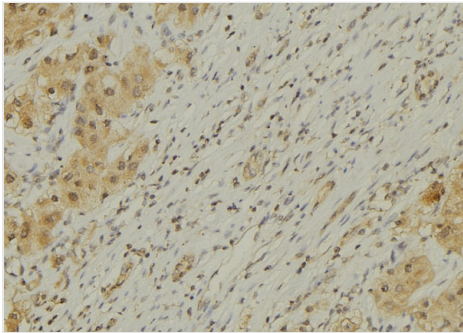
IHC (Immunohistochemistry)

At 1/100 staining mouse heart tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary



IHC (Immunohistochemistry)

At 1/100 staining rat liver tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary



IHC (Immunohistochemistry)

At 1/100 staining human kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary

ADDITIONAL INFORMATION

Related Product Information for anti-SETD2 antibody	Description: Histone methyltransferase that specifically trimethylates 'Lys-36' of histone H3 (H3K36me3) using dimethylated 'Lys-36' (H3K36me2) as substrate (PubMed:16118227, PubMed:19141475, PubMed:21526191, PubMed:21792193, PubMed:23043551, PubMed:27474439). Represents the main enzyme generating H3K36me3, a specific tag for epigenetic transcriptional activation (By similarity). Plays a role in chromatin structure modulation during elongation by coordinating recruitment of the FACT complex and by interacting with hyperphosphorylated POLR2A (PubMed:23325844). Acts as a key regulator of DNA mismatch repair in G1 and early S phase by generating H3K36me3, a mark required to recruit MSH6 subunit of the MutS alpha complex: early recruitment of the MutS alpha complex to chromatin to be replicated allows a quick identification of mismatch DNA to initiate the mismatch repair reaction (PubMed:23622243). Required for DNA double-strand break repair in response to DNA damage: acts by mediating formation of H3K36me3, promoting recruitment of RAD51 and DNA repair via homologous recombination (HR) (PubMed:24843002). Acts as a tumor suppressor (PubMed:24509477). H3K36me3 also plays an essential role in the maintenance of a heterochromatic state, by recruiting DNA methyltransferase DNMT3A (PubMed:27317772). H3K36me3 is also enhanced in intron-containing genes, suggesting that SETD2 recruitment is enhanced by splicing and that splicing is coupled to recruitment of elongating RNA polymerase (PubMed:21792193). Required during angiogenesis (By similarity). Required for endoderm development by promoting embryonic stem cell differentiation toward endoderm: acts by mediating formation of H3K36me3 in distal promoter regions of FGFR3, leading to regulate transcription initiation of FGFR3 (By similarity). In addition to histones, also mediates methylation of other proteins, such as tubulins and STAT1 (PubMed:27518565, PubMed:28753426). Trimethylates 'Lys-40' of alpha-tubulins such as TUBA1B (alpha-TubK40me3); alpha-TubK40me3 is required for normal mitosis and cytokinesis and may be a specific tag in cytoskeletal remodeling (PubMed:27518565). Involved in interferon-alpha-induced antiviral defense by mediating both monomethylation of STAT1 at 'Lys-525' and catalyzing H3K36me3 on promoters of some interferon-stimulated genes (ISGs) to activate gene transcription (PubMed:28753426). Post Translational Modifications: May be automethylated. Subunit Structure: Specifically interacts with hyperphosphorylated C-terminal domain (CTD) of RNA polymerase II large subunit (POLR2A): binds to CTD heptad repeats doubly phosphorylated on 'Ser-2' and 'Ser-5' of each heptad (PubMed:16118227, PubMed:16314571). Interacts with HTT (PubMed:11461154, PubMed:9700202, PubMed:10958656). Interacts with IWS1 (PubMed:19141475). Interacts with p53/TP53; leading to regulate p53/TP53 target genes (PubMed:18585004). Component of a complex with HNRNPL (PubMed:19332550). Interacts with TUBA1A; the interaction is independent on alpha-tubulin acetylation on 'Lys-40' (PubMed:27518565). Interacts with STAT1 (PubMed:28753426). Similarity: The low charge region mediates the transcriptional activation activity. The catalytic SET domain binds histone H3 (PubMed:27474439, PubMed:28256625). It is also able to bind oncogenic histone H3 K36M/I found in a number of cancer types, in which histone H3 'Lys-36' is replaced by a Met or an Ile residue. When binding the oncogenic variant histone H3 K36M/I, the SET domain undergoes dramatic conformational change to accommodate the histone H3 peptide, leading to sequester and inhibit SETD2 activity and block global H3K36 methylation (PubMed:27474439, PubMed:28256625). Belongs to the class V-like SAM-binding methyltransferase superfamily. Histone-lysine methyltransferase family. SET2 subfamily.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	296452963
NCBI GeneID	29072
UniProt Accession #	Q9BYW2
Molecular Weight	Observed: 28 kDa Predicted: 288 kDa
NCBI Official Full Name	Histone-lysine N-methyltransferase SETD2
NCBI Official Synonym Full Names	SET domain containing 2, histone lysine methyltransferase
NCBI Official Symbol	SETD2
NCBI Official Synonym Symbols	LLS; HYPB; SET2; HIF-1; HIP-1; KMT3A; HBP231; HSPC069; p231HBP
NCBI Protein Information	histone-lysine N-methyltransferase SETD2

UniProt Protein Name	Histone-lysine N-methyltransferase SETD2
UniProt Gene Name	SETD2
UniProt Synonym Gene Names	HIF1; HYPB; KIAA1732; KMT3A; SET2; HIP-1; hSET2
UniProt Entry Name	SETD2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/setd2-antibody-peptide-elisa-immunohistochemistry-western-blot-elisa/328253>