

SET8 / PR-SET7 antibody (pAb)

Catalog Nos: 61009, 61010**RRID:** AB_2615004**Isotype:** IgG**Application(s):** WB**Reactivity:** Human**Volumes:** 100 µl, 10 µl**Purification:** Affinity Purified**Host:** Rabbit**Molecular Weight:** 45 kDa

Background: SET8 (SET-domain containing protein 8, PR-SET7, SETD8, KMT5A) is a SET domain-containing histone methyltransferase that specifically monomethylates histone H4 Lys20. H4 Lys20 monomethylation is enriched during mitosis and is associated with transcriptional repression. SET8 mainly functions in euchromatic regions, playing a role in gene silencing. SET8 knockout is homozygous lethal in mice and its function is required for cell cycle progression and cell proliferation. SET8 is required for proper chromosome condensation during interphase and chromosome segregation during mitosis. SET8 is also involved in DNA damage repair, as cells lacking SET8 function accumulate massive amounts of DNA damage. SET8 has been found to methylate p53 at Lys382, indicating a potential mechanism for SET8's role in the DNA damage repair pathway.

Immunogen: This SET8 / PR-SET7 antibody was raised against a peptide corresponding to amino acids within the N-terminal half of human SETD8.

Buffer: Purified IgG in 70 mM Tris (pH 8), 105 mM NaCl, 31 mM glycine, 0.07 mM EDTA, 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:

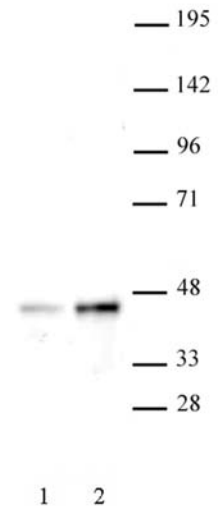
Applications Validated by Active Motif:

WB*: 1:500 - 1:1,000 dilution

*Note: many chromatin-bound proteins are not soluble in a low salt nuclear extract and fractionate to the pellet. Therefore, we recommend a High Salt / Sonication Protocol when preparing nuclear extracts for Western blot.

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



Western blot of SET8 / PR-SET7 antibody. Nuclear extract of HeLa cells (20 µg per lane) probed with SET8 / PR-SET7 antibody (1:500). Lane 1: No treatment. Lane 2: Cells treated with colcemid.