## Recombinant SETD3 protein



Catalog No: 81279, 81979
Expressed In: Baculovirus

Quantity: 20, 1000 μg Concentration: 0.5 μg/μl

Source: Human

**Buffer Contents:** Recombinant SETD3 protein is supplied in 25 mM HEPES-NaOH pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100, and 0.5 mM TCEP.

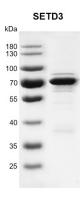
**Background:** SETD3 (SET Domain Containing 3, Actin Histidine Methyltransferase), is a protein-histidine N-methyltransferase that specifically mediates methylation of actin at 'His-73'. Histidine methylation of actin is required for smooth muscle contraction of the laboring uterus during delivery. According to researches, SETD3 does not have proteinlysine N-methyltransferase activity and probably only catalyzes histidine methylation of actin.

**Protein Details:** Full length human SETD3 protein (accession number NP\_115609.2 was expressed in a baculovirus expression system and contains an N-terminal FLAG-Tag. The molecular weight of SETD3 is 68.5 kDa.

**Application Notes:** Recombinant SETD3 protein is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling.

**Storage and Guarantee:** Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of arrival.

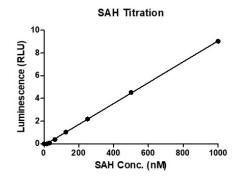




## Recombinant SETD3 protein gel

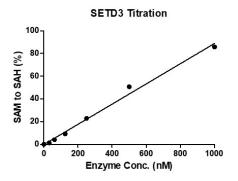
10% SDS-PAGE Coomassie staining MW: 68.5 kDa

Purity: >90%



## MTase-Glo Assay for Recombinant SETD3 protein methyltransferase activity

1  $\mu$ M beta-actin peptide (66-TLKYPIEHGIVTNWD-80) and 1  $\mu$ M SAM were incubated with different concentrations of recombinant SETD3 protein in an 8  $\mu$ l reaction system containing 50 mM Tris-HCl pH 8.6, 0.02% Triton X-100, 2 mM MgCl2, 1 mM TCEP for 1 hr. 5×MTase-Glo Reagent was added to the products and incubated for 30 min. Then MTase-Glo Detection was added and luminescence were read after another 30 min incubation. SAH standard curve (0-1  $\mu$ M) was performed following the same protocol.



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