

Product datasheet for SC313482

SETD4 (NM_017438) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Tag: Tag Free

Symbol: SETD4

Synonyms: C2lorf18; C2lorf27

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM_017438, the custom clone sequence may differ by one or more

nucleotides

ATGCAGAAAGGAAAAGGGAGACAAGCCGGATCAGAAGACGAAAACTCTGCGGAAGTTCTGAATCAAGAG GAGTGAATGAGAGCCACAAGTCTGAATTTATAGAGCTGAGGAAGTGGCTGAAAGCTAGGAAGTTTCAAGA TTCAAACTTAGCGCCTGCTTGTTTTCCAGGTACAGGAAGAGGGCTGATGAGTCAAACATCCCTGCAGGAG GGACAGATGATTATTTCGTTGCCTGAGAGTTGCCTGCTCACCACGGACACAGTGATTCGAAGCTACTTAG GGGCATACATTACTAAGTGGAAGCCTCCTCCATCTCCTCTGCTGGCGCTTGTGCACCTTTTTAGTTTCAGA AAAGCATGCTGGGCACCGATCTCTTTGGAAGCCTTACCTGGAGATTTTACCCAAGGCGTATACCTGCCCT GTTTGTTTGGAGCCGGAAGTGGTGAACCTTCTTCCCAAATCTTTAAAAGCAAAGGCTGAAGAGCAGAGAG CCCACGTGCAGGAGTTCTTTGCTTCCTCCAGAGACTTTTTCTCTTCTCTGCAGCCTCTGTTTGCGGAGGC TGTTGACAGCATCTTCAGCTACAGTGCCCTGCTGTGGGCTTGGTGCACCGTCAACACCAGAGCCGTGTAC CTGAGGCCCAGGCAGCGGGAATGCCTTTCTGCAGAGCCGGACACCTGTGCACTCCGTACCTGGACC TGCTGAATCATAGCCCACATGTCCAGGTAAAAGCAGCGTTTAATGAAGAAACTCATTCTTACGAAATTAG AACGACTTCACGTTGGAGAAAGCATGAAGAGGTATTCATCTGTTACGGCCCTCACGATAATCAACGGCTG TTCCTGGAATACGGATTTGTTTCTGTCCATAATCCTCATGCTTGTGTTTATGTCTCAAGAGAAATACTTG TTAAATATCTTCCATCAACAGATAAACAGATGGACAAAAAGATTTCTATTTTAAAGGATCATGGCTATAT AGAAAATTTGACATTTGGATGGGATGGACCATCTTGGAGGCTACTCACAGCCCTTAAGTTGTTATGTCTG GAAGCTGAGAAATTTACATGCTGGAAAAAAGTACTTCTTGGGGAGGTAATTTCAGATACGAATGAGAAGA CAAGTTTGGACATAGCCCAGAAAATATGCTATTATTTCATAGAAGAGACTAATGCTGTGCTTCAAAAGGT GAGCTAAAGATTCTCAGGGCATCTGCCGAGACCCTGCACAGTTTGCAAACAGCTTTTACCTGA

Restriction Sites: Please inquire



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EU: info-de@origene.com CN: techsupport@origene.cn **OR**iGENE

ACCN: NM_017438

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts

of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at customercare team at <a href="ma

calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into

OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected

reference without frameshifts, and is delivered as lyophilized plasmid DNA.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um

filter is required.

RefSeq: <u>NM_017438.2</u>, <u>NP_059134.1</u>

RefSeq Size: 3360 bp

RefSeq ORF: 1323 bp

Locus ID: 54093

UniProt ID: Q9NVD3

Cytogenetics: 21q22.12

Domains: SET



Gene Summary:

Histone-lysine N-methyltransferase that acts as a regulator of cell proliferation, cell differentiation and inflammatory response (PubMed:31308046). Regulates the inflammatory response by mediating mono- and dimethylation of 'Lys-4' of histone H3 (H3K4me1 and H3K4me2, respectively), leading to activate the transcription of proinflammatory cytokines IL6 and TNF-alpha (By similarity). Also involved in the regulation of stem cell quiescence by catalyzing the trimethylation of 'Lys-20' of histone H4 (H4K20me3), thereby promoting heterochromatin formation (PubMed:31308046). Involved in proliferation, migration, paracrine and myogenic differentiation of bone marrow mesenchymal stem cells (BMSCs) (By similarity). [UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) encodes the longest isoform (a).