

NgTet1 recombinant protein

Recombinant NgTet1 (1-321) protein

CATALOG # AAA60157	HOST E Coli
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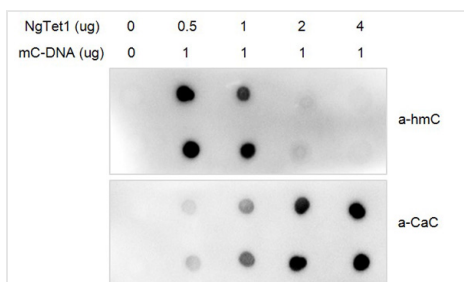
PRODUCT SYNONYMS

NgTet1; Recombinant NgTet1 (1-321) protein; Naegleria Tet-like dioxygenase; NgTet1 recombinant protein

PRODUCT SPECIFICATIONS

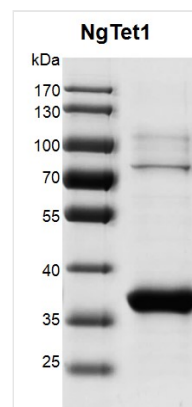
Host	E Coli
Form/Format	Recombinant NgTet1 protein is supplied in 25mM Tris pH8.0, 300mM NaCl, 10% glycerol, and 0.5mM TCEP.
Protein Species	Naegleria
Tag	His-Tag
Notes	Recombinant NgTet1 protein is suitable for use in cytosine oxygenase assays, 5-mC sequencing, enzyme kinetics, inhibitor screening, and selectivity profiling.. TET Activity Assay Conditions: 250nm of 30bp DNA oligos (sequence: 5'-CAGTAACTGTGGTC(mC)GGTAACTGACTTGCA-3', contains a 5mCpG site) was incubated with 100nm recombinant TET1 (1418-2136) protein in buffer containing 50mM HEPES, pH 8.0, 100uM Fe(NH4)2(SO4)2, 2mM ascorbate, 1mM alpha-ketoglutarate, 1mM ATP, 1mM TCEP at 37C for 1 hr. Activity was detected by Dot-blot.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



Application Data

Recombinant NgTet1 activity assay 1 ug of 30 nt ssDNA oligos with a 5mCpG site were incubated with different concentrations of NgTet1 in a reaction system at 34 degree C for 1 hour. Sample was concentrated to 10 ul, and 1 ul was spotted onto nylon membrane. 5hmC Ab and 5-caC Ab were used to detect products. NgTet1 activity assay was detected by Dot-Blot..



SDS-PAGE

Recombinant NgTet1 protein 10% SDS-PAGE Coomassie staining MW: 38.7 kDa Purity: >85%

ADDITIONAL INFORMATION

Related Product Information for NgTet1 recombinant protein	Short Description: Recombinant NgTet1 protein was expressed in E Coli as the full-length protein (accession number XP_002667965.1) with an N-terminal 6xHis-tag. The molecular weight of NgTet1 is 38.7 kDa. It is suitable for use in cytosine oxygenase assays, 5-mC sequencing, enzyme kinetics, inhibitor screening, and selectivity profiling. Background: Ten Eleven Translocation (TET) family proteins are cytosine oxygenases that catalyze the conversion of 5-methylcytosine (5-mC) into 5-hydroxymethylcytosine (5-hmC). 5-hmC can be further oxidized into 5-formylcytosine (5-fC) and 5-carboxylcytosine (5-caC) by TET proteins. Methylation at the C5 position of cytosine is an epigenetic modification of the mammalian genome that plays an important role in transcriptional regulation. TET proteins are responsible for initiating the enzymatic deamination process leading to cytosine demethylation. The Tet family of dioxygenases is widely distributed across the tree of life, including in the heterolobosean amoeboid flagellate Naegleria gruberi. NgTet1 (Naegleria Tet-like protein) is a homologue of mammalian Tet proteins. Like mammalian Tet proteins, NgTet1 acts on 5-mC and generates 5-hmC, 5-fC and 5-caC.
Product Categories/Family for NgTet1 recombinant protein	Recombinant Proteins; Cytosine Oxygenase (TET)

NCBI AND UNIPROT INFORMATION

Molecular Weight	Molecular weight of NgTet1 is 38.7kDa
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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/ngtet1-recombinant-protein-e-coli/60157>