

Division of Signal Transduction Therapy

Standard Operation Procedure

Preparation of His-Halo-NEMO [D311N]

Enzyme description:- His-Halo-NEMO 2-419 [D311N]

Clone number:- DU23729

Source:- human Recombinant

Tag:- N-terminal His-TEV

Purification method:- Ni⁺⁺-NTA-Sepharose, SEC

Expression system:- E.coli

Calculated molecular mass:-

Monoisotopic 83728

Average Mass 83777

[cysteines reduced, methionines have not been oxidised]

Theoretical pI:- 5.64

Purity:- 90%

Enzyme storage buffer:-

50 mM HEPES pH 7.5, 150mM NaCl, 1mM DTT

Storage temperature:- -80°C

Assay:-

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Clone Data Sheet

Protein name His-Halo-NEMO [D311N]

<u>Protein</u>	His-Halo-NEMO 2-419 [D311N]
<u>Synonyms</u>	IKK-gamma
<u>Clone Number</u>	DU23729
<u>Species</u>	human
<u>Accession Number</u>	Protein: Q9Y6K9
<u>Tags</u>	N-terminal His-TEV-
Aminoacid sequence of the expressed protein	MGSSHHHHHHENLYFQMAEIGTGFPFDPHYVEVLGERMHYVDVGPRD GTPVLF FLHGNPTSSYVWRNIIPHVAPTHRCIAPDLIGMGKSDKPD LG YFFDDHVRFM DAFIEALGLEEVVLVIHDWGSALGFHWAKRNPERVKG IAFM EFIRPIPTWDEWPEFARETFOAFRTTDVGRKLIIDQNVFIEGT LPMGVVRPLTEVEMDHYREPFLNPVDREPLWRFPNELPIAGEPANIV ALVEEYMDWLHQSPVPKLLFWGTPGVLIPPAEAARLAKSLPNCKAVD IGPGLNLLQEDNPD LIGSEIARWLSTLEISGGSNRHLWKSQ LC EMVQ PSGGPAADQDVLGEESPLGKPAMLHLPSEQGAPETLQRCLEENQELR DAIRQSNQILRERCEELLHFQASQREEKEFLMCKFQEAR KLVERLGL EKLDLKRQKEQALREVEHLKRCQQQMAEDKASVKAQVTSLLGELQES QSRLEAATKECQALEGRARAASEQARQLESEREALQQQHSVQVDQLR MQGQSVEAALRMERQAASEEKRKL AQLQVAYHQLFQ EYDNHIKSSV GSEK KRGMQLEDL KQQLQQAEEALVAKQEVIDKLKEEAEQHKIVMET VPVLKAQADIYKANFQ AERQAREKLA EKKELLOEQLEQLOREYSKLK ASCQESARIEDMRKRHVEVSQAPLPPAPAYLSSPLALPSQRRSPPEE PPDFCCPKCQYQAPDMDTLQIHVMECIE
Native sequence	in bold NEMO residues 2 - 419, representing full length with the start Met. Halo-tag in italic
Protease cleavage	TEV protease underlined
Cloning sites	BamHI / NotI

**DNA sequence
of the expression
cassette**

ATGGGCAGCAGCCATCATCATCATCACGAAAACCTGTATTTTCAGatggc
agaaatcggtactggctttccattcgacccccattatgtggaagtcctgggcg
agcgcgatgcactacgtcgatggttggtccgcgcgatggcaccctgtgctgttc
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TGACGTCTTGCTCGGGGAGCTGCAGGAGAGCCAGAGTCGCTTGGAGGCTGCC
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GCGGCAGCTGGAGAGTGAGCGGAGGCGCTGCAGCAGCAGCACAGCGTGCAGG
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CGCCAGGCCGCTCGGAGGAGAAGAGGAAGCTGGCCCAGTTGCAGGTGGCCTA
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GCCGAGAAGAAGGAGCTCCTGCAGGAGCAGCTGGAGCAGCTGCAGAGGGAGTA
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TCCTTCCCCCTGGCCCCGCCCAGCCAGAGGAGGAGCCCCCCCCGAGGAGCCACC
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AGATACATGTCATGGAGTGCATTGAGTAGGCGGCCGC