

Product datasheet for **RC206013**

SAMHD1 (NM_015474) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SAMHD1 (NM_015474) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SAMHD1
Synonyms:	CHBL2; DCIP; HDDC1; hSAMHD1; MOP-5; SBBI88
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC206013 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCAGCGAGCCGATTCCGAGCAGCCCTCCAAGCGTCCCCGTTGCGATGACAGCCCGAGAACCCCTCAA
 ACACCCCTCCGCAGAGGCAGACTGGTCCCGGGCCTGGAATCCATCCGACTACAAGACATGGGGTCC
 GGAGCAGGTGTGCTCCTTCTCAGGCGCGTGGCTTTGAAGAGCCGGTGTGCTGAAGAACATCCGAGAA
 AATGAAATCACAGGCGCATTACTGCCTTGTCTTGATGAGTCTCGTTTTGAAAATCTTGGAGTAAGTCTCT
 TGGGGGAGAGGAAGAAGCTGCTTAGTTATATCCAGCGATTGGTTCAAATCCACGTTGATACAATGAAGGT
 AATTAATGATCCTATCCATGGCCACATTGAGCTCCACCCTCTCCTCGTCCGAATCATTGATACACCTCAA
 TTTCAACGTCTTCGATACATCAAACAGCTGGGAGGTGGTACTATGTTTTCCAGGAGCTTCGCACAATC
 GATTTGAGCATAGTCTAGGGTGGGTATCTAGCAGGATGTCTAGTTCACGCACTGGGTGAAAAACAACC
 AGAGCTGCAGATAAGTGAACGAGATGTTCTCTGTGTTGAGATTGCTGGACTTTGTCATGATCTCGGTCAT
 GGCCATTTTCTCACATGTTGATGGACGATTTATTCCACTTGTCTGCCCCGGAGGTGAAATGGACGCATG
 AACAAAGGCTCAGTTATGATGTTGAGCACCTTATTAATCTAATGGAATTAAGCCTGTGATGGAACAATA
 TGGTCTCATCCCTGAAGAAGATATTTGCTTTATAAAGGAACAAATGTAGGACCCTTGAATCACCTGTA
 GAAGATTCATTGTGGCCATATAAAGGGCGTCTGAAAACAAAAGCTTCTTTATGAGATAGTATCTAATA
 AAAGAAATGGCATTGATGTGGACAAATGGGATTATTTGCCAGGGACTGCCATCATCTTGGAAATCCAAAA
 TAATTTTGATTACAAGCGCTTTATTAAGTTGCCCGTGTCTGTGAAGTAGACAATGAGTTGCGTATTTGT
 GCTAGAGATAAGGAAGTTGAAAATCTGTATGACATGTTCCACACTCGCAACTCTTACACCGTAGAGCTT
 ATCAACACAAAGTTGGCAACATTATTGATACAATGATTACAGATGCTTTTCTCAAAGCAGATGACTACAT
 AGAGATTACAGGTGCTGGAGAAAAAAGTATCGCATTTCTACAGCAATTGACGACATGGAAGCCTATACT
 AAGCTGACAGATAACATTTTTCTGGAGATTTTACTCTACTGATCCCAAATTGAAAAGCAGCAGGAGAGA
 TTTTAAAAACAAATGAATACCGTAATCTATTCAAGTATGTGGGTGAGACGCAGCCAAACAGGACAAATAAA
 GATTAAGGGGAGGACTATGAATCTCTTCCAAAAGAGGTTGCCAGTGCTAAACCCAAAGTATTGCTAGAC
 GTGAAACTGAAGGCTGAAGATTTTATAGTGGATGTTATCAACATGGATTATGGAATGCAAGAAAAGAAC
 CAATTGATCATGTAGCTTCTATTGTAAGACTGCCCCAACAGAGCAATCAGGATTAATAAAACCAGGT
 TTCACAACTTCTGCCAGAGAAATTTGTAGAGCAGCTGATTCGAGTATATTGTAAGAGGTGGACAGAAAAG
 AGTTTGTATGCCCAAGACAATATTTTGTTCAGTGGTGTGCAGACAGAAATTTCCACCAAGCCGAGGATG
 GCGATGTTATAGCCCCACTCATAACACCTCAAAAAAGGAATGGAACGACAGTACTTCAGTCCAAAATCC
 AACTCGCCTCCGAGAAGCATCCAAAAGCAGAGTCCAGCTTTTTAAAGATGACCCAATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC206013 protein sequence
 Red=Cloning site Green=Tags(s)

MQRADSEQPSKRPRCDDSPRTPSNTPSAEADWSPGLELHPDYKTWGPEQVCSFLRRGGFEEPVLKNI
 NEITGALLPCLDESRFENLGVSSLGERKKLLSYIQRLVQIHVDTMKVINDPIHGHIELHPLLVRIDTPQ
 FQRLRYIKQLGGGYVFPGASHNRFHSLGVGYLAGLVHALGEKQPELQISERDVLVQIAGLCHDLGH
 GPF SHMFDGRFIPLARPEVKWTHEQGSVMMFEHLINSNGIKPVMEQYGLIPEEDICFIEQIVGPLESPV
 EDLWPKYGRPENKSFLYEIVSNKRNGIDVDKWDYFARDCHHLGIQNNFDYKRFIKFARVCEVDNELRIC
 ARDKEVGNLYDMFHTRNSLHRRAYQHKVGNIDTMITDAFLKADDYIEITGAGEKKYRISTAIDDMEAYT
 KLTDNIFLEILYSTDPKLDAREILKQIEYRNLFKYVGETQPTGQIKIKREDYELPKEVASAKPKVLLD
 VKLKAEDFIVDVINMDYGMQEKNPIDHVSFYCKTAPNRAIRITKNQVSQLLPEKFVEQLIRVYCKKVDK
 SLYAARQYFVQWCADRNFTKPDGDVIAPLITPQKKEWNDSTSVQNPTRLREASKSRVQLFKDDPM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6317_h12.zip
Restriction Sites: SgfI-MluI
Cloning Scheme:



ACCN: NM_015474
ORF Size: 1878 bp

OTI Disclaimer: 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 clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.

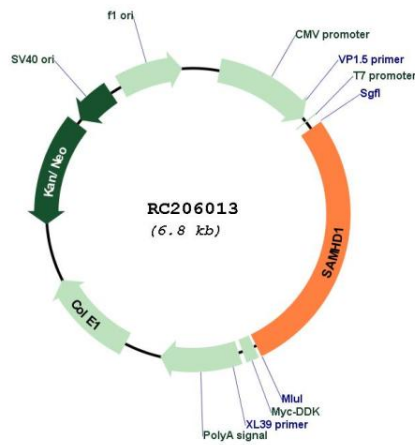
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_015474.4](#)
RefSeq Size: 3189 bp

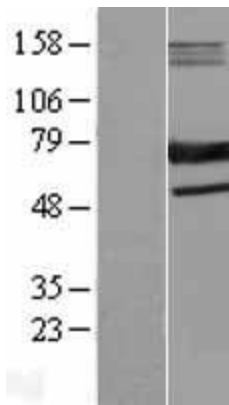
RefSeq ORF: 1881 bp
 Locus ID: 25939
 UniProt ID: [Q9Y3Z3](#)
 Cytogenetics: 20q11.23
 Domains: SAM, HD
 MW: 72.3 kDa

Gene Summary: This gene may play a role in regulation of the innate immune response. The encoded protein is upregulated in response to viral infection and may be involved in mediation of tumor necrosis factor-alpha proinflammatory responses. Mutations in this gene have been associated with Aicardi-Goutieres syndrome. [provided by RefSeq, Mar 2010]

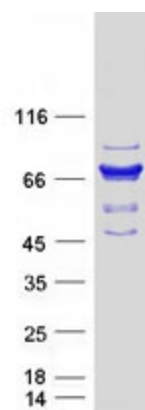
Product images:



Circular map for RC206013



Western blot validation of overexpression lysate (Cat# [LY414526]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206013 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SAMHD1 protein (Cat# [TP306013]). The protein was produced from HEK293T cells transfected with SAMHD1 cDNA clone (Cat# RC206013) using MegaTran 2.0 (Cat# [TT210002]).