

Product datasheet for RC227415

Nance Horan Syndrome Protein (NHS) (NM_001136024) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nance Horan Syndrome Protein (NHS) (NM_001136024) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NHS
Synonyms:	CTRCT40; CXN; SCML1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC227415 representing NM_001136024 Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGC
GCC

ATGGCTCTGGCCTGCTGCATGCCAAGAATGCAGCCGTCTCAACCTGGACATAGAGAGTAAGCTGAGTG
TGTACTACCGCGCCCGTGGCACCAGCAGCGCAACATCTTCTCCAGCCACAAGGCCACCCTGCGTGGA
GGAGCTGCACCGCCACGCCCGGAGAGCCTGCAAGCCCTGCGCAGAGAACCACCGGAGCCGGAGCGATCGC
CGAGAGCAAAGAGCAGCTGCCCCCTTTCCATTGCAGCTCCTCCACTGCCAGCCTACCCTCCAGCTCACA
GCCAGAGGAGGCGTGAGTTTAAGGACCGTCACTTTTTAACGTTTAAACAGCACCCGTTCCGCCCTCCCCAC
TGAATGTTGCCACATGACCCCGTGGAGTAGAAAGTCCCATCCCCAGAGGATGAAGATACAGATGTCATG
TTAGGGCAGAGGCCGAAAAACCAATACACAATATCCCTTCCACTGGACAAGCAGACCAACTGGAGCA
AAGCACTACCTCTCCCGACGCCAGAGGAGAAGATGAAACAAGATGCCAAGTGATTTCTTCTTGCAATAT
TCCCATCAATGTTACTGGAGTTGGCTTTGACAGAGAGGCTAGTATACGCTGCTCTCTGGTTCATTACAA
TCGGTACTACAGCGGAGACGAAAATTGAGGAGGAGGAAAACCATCTCGGGTATCCCCAGAAGAGTTCAAC
AAGAAATAGATTCTGATGAATCACCAGTGGCCAGGGAAAGGAATGTGATTGTGCACACAAACCCAGACCC
CTCCAACACTGTCAATAGGATATCCGGAACAGGACTCTGAGTGCCAAACCGAGGATATTCTGATTGCT
GCCCATCCAGAAGGAGAATCAGAGCTCAAAGGGTCAAAGCATTGCAGCTTCCCTTTCTCATTCTGCTG
GCAACATTTCTGCCCTAGCAGACAAAGGTGACACCATGTTACTCCTGCAGTGAGCAGCCGACAAAGATC
TCGGAGCCTTCCCGGAAGGTAATAGAGGTGGGGATGCTGAGCCCAAAGTTGGCGCTAAACCTCAGCA
TATGAAGAGGGAGAGTCTTTTGGGTGACCATGAAAGAACCCTAATGATTTTCAGTGAGGCTCCAAGCA
GCCCGAGTGCCAGGACCACAGCCTACTTTGGCCTGGCCTGCTCTCAACATCTTACAGCCCCAGCA
CAAATTAAGTGAGAGGGGAAGTACGCTGTCCCGAATGGCTGCTGACTCTGGCAGCTGTGACATCTCC
TCCAACCTCAGACAGTCTTTGGGAGCCCCATCCACTGCATCTCCACGGCTGGCGTCTCCTTAGCAGCCACA
TGGACCAGAAAGATGACCACAGTCATCCAGTGGCAACTGGAGTGGGAGCAGCTCCACGTGCCCTCGCA
GACCTCAGAAACCATCCCTCCTGCACTTCTCCTCCACTCACTGGCTCTTACACTGTGACTCGGAGTTG
TCACTAAACACAGCCCCTCATGCCAATGAGGATGCCAGTGTTCCTGTCAGAGCAATACAATGACCACT



[View online >](#)

TGGATAAAGTGAGAGGCCATCGGGCAAACCTCCTTTACCTCCACTGTTGCAGACCTGCTGGATGATCCCAA
CAACAGCAACACAAGTGACAGTGAGTGGAAATTACCTACACCACCACCATGATGCCTCCTGCCGCCAGGAT
TTTAGTCTGAGCGTCCCAAGGCAGACAGCCTGGGCTGCCAAGCTTCACAAGCATGGCCACTTATGACA
GCTTTCTGGAAAAGTCTCCATCAGACAAAGCGGACACTAGCTCTCACTTTTCAGTAGACACGGAAGGATA
CTATACCTCCATGCACTTTGACTGTGGTCTCAAAGGTAATAAGAGCTATGTCTGCACTATGCAGCCCTG
GGCCCAGAGAATGGCCAGGGTGTAGGGGCTTCCCCTGGTCTTCCAGATTGTCCCTGGCAGGACTACTTAG
ACCACAAGAGGCAGGGAAGACCAAGCATCTCTTTCAGGAAACCAAGGCCAAAGCCGACCCACCTAAACG
TAGCTCATCATTGAGGAAGTCTGATGGAAACGCAGATATTTCTGAGAAGAAAGAACCAAAGATAAGCAGT
GGTCAGCACCTGCCTCACAGTTCAGGGAAATGAAGCTGCCTCTTGATTCGCCAACACGCCCTTCTCGAA
TGGAAAACGCCAATCTTCCCACCAAGCAGGAACCTTCTTGATAAACAGAGTGAACAAGGCATTAAGGA
ACCTCAGTTAGATGCTTCGGATATTCCACCATTCAAAGATGAAGTTGCCGAATCCACACACTATGCAGAC
CTCTGGCTCCTAAATGACTTGAAAACAAATGATCCTTATAGATCTCTATCTAATTCAGCACCGCTACGG
GTACCACAGTCATTGAATGCATCAAATCTCCAGAGAGCTCTGAATCCCAAACATCACAATCAGAATCAAG
AGCCACCACCCCATCTCTCCTTCTGTTGACAATGAGTTAAACTGGCTTCACCAGAAAAGCTGGCTGGC
TTGGCATCTCCATCAAGTGGCTATTCAAGCCAGTCTGAAACGCCAACATCCTCTTCCCTACAGCTTTCT
TTTCAGGTCCATTGTCTCCCGGAGGTAGCAAAAAGAAAACCTAAAGTCCCAGAAAAGAAAATCCTCACTACA
GCAACCCTCTTTAAAAGATGGAACATATCACTGAGTAAAGACCTTGAACCTTCCAATTATACCTCCTACC
CATCTTGATCTAAGTGCTTTCATAATGTCTTGAACAAACATTCCACCACCGTCATCCACTGCATGTTT
TTACTCATAATAAGCAGAACACAGTAGGAGAAACACTGAGGTCGAATCCTCCACCGTCCCTTGCAATTAC
ACCAACGATCCTGAAATCTGTTAACCTTAGGTCCATCAACAAGTCTGAAGAAGTTAAGCAAAAAGAAGAA
ACAATACAGATCTCCCTATTTAGAGGAAAGCACACTCACAACGGCTGCCTGTCTCCAAGTAAGATTA
GGCCGCATACAGCAAATAAATCAGTATCTCGTCAATACTCCACTGAAGACACCATACTGCTTTTTTAGA
CTCTTCTGCAGTTGAGATGGGACCAGATAAATACATTTAGAAAAAACTCTACTTTTGTGTAAGAATA
CGCTGCGATCCAGAAACATAACATCAGCTGGTAGCAGTCTTCTAGATTCAAATGTCACAAAAGACCAAG
TGCGTACAGAGACTGAGCCTATTCCAGAAAACACGCCAACCAAAAACCTGTGCTTTTCCCACAGAAGGATT
TCAGAGGGTCTCTGCTGCCCGCCAAATGATTTGGATGGTAAAATAATACAATATGGACCTGGTCCAGAC
GAAACTCTAGAACAGGTACAGAAGGCACCTCTGCAGGTCTGGAGGAAGTTGCACAACCTGAATCTGTGG
ATGTAATCACATCTCAGTCAGACTCACCAACTAGAGCAACAGATGTAAGCAATCAATTTAAGCATCAATT
TGTTATGAGCCGCCACCATGACAAAGTGCCTGGTACTATCAGCTATGAATCGGAGATAACATCTGTAAT
TCATTCCCTGAAAAATGTTCCAAGCAGGAAAATATTGCTTCAGGTATTTACGCCAAAAGTGCCTCTGATA
ACAGCAAAGCAGAGGAGACCCAAGGAAATGTGGATGAGGCTTCATTGAAAGAATCATCACCGAGTGATGA
CTCCATCATTTACCACCTTAGTGAAGACTCCCAAGCTGAAGCAGAGGGTGTGTTCTGTCTCCAAACAAA
CCTCGAACAACTGAGGATTTATTTGCAGTCATTACAGATCCAAGAGGAAAGTACTTGAAGAAAAGATT
CCGGGGACATGTCTGTTGGAAGCAAATCGAGAGCTCCCCTCAGCAGTAGCAGCAGCAGCGCCAGTCCAT
CACTTCACCCAGCAGTAATGTGACAACCCCAACAGCCAGAGGTCTCCTGGTCTCATATACCGAAATGCC
AAAAAGTCCAACACATCCAATGAAGAGTTAAGCTGTTACTGCTCAAGAAAGGCAGTCGCTCAGATTCTA
GTTACCGCATGTCTGCCACTGAGATCCTGAAGAGCCCCATACTGCCAAACCTCCTGGGGAGCTCACAGC
AGAGTCCCCTCAGAGCACCGATGATGCCATCAGGGGTACAAGGGGCTGAGGCATTGTCCCCTCTCT
CCATGCTCCCCACGAGTTAATGCAGAAGGCTTTTCTCGAAGAGCTTTGCCACCTCAGCATCAGCAAGGG
TTGGACGTTCTCGGGCCCTCCTGCAGCCAGCAGCAGCCGCTACAGTGTCCGCTGCCGGTGTACAATAC
GCCCATGCAGGCAATCTCCGAGGAGAGACGGAATTTCTGACGGGAGCCACATGACGACCGTTCTCTCC
CAGAGTTCAACA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC227415 representing NM_001136024
 Red=Cloning site Green=Tags(s)

MALACMPKNAAVSNLDIESKLSVYYRAPWHQQRNIFLPATRPCCVEELHRHARQSLQALRREHRSRSDR
 REQRAAAPLSIAAPPLPAYPPAHSQRRREFKDRHFLT FNSTRSPSPTCCHMTPWSRKSHPPEDD TDVM
 LGQRPKNPIHNIPSTLDKQTNWSKALPLPTPEEKMKQDAQVISSCIIPINVTGVGFDREASIRCSLVHSQ
 SVLQRRRKLRRRKTI SGIPRRVQEQEIDSDESPVARERNVIVHTNPDPSNTVNRI SGT RDSECQTEDILIA
 APSRRRI RAQRGQSI AASLSHSAGNISALADKGMTMFTPAVSSRTRSRLPREGNRGGDAEPKVGAKPSA
 YEEGESFVGDHERTPNDFSEAPSSPSAQDHQPTLGLACSQHLHSPQHKL SERGRSRLSRMAADSGSCDIS
 SNSDTFGSPIHCISTAGVLLSSHMDQKDDHQSSSGNWSGSSTCPSQTSETIPPAASPLTGSSHCDEL
 SLNTAPHANEDASVFVTEQYNDHLDKVRGHRANSFTSTVADLLDDPNNSNTSDSEWNYLHHHDASCQRD
 FSPERP KADSLGCP SFTSMATYDSFLEKSPSDKADTSSHFSVDTEGYTSMHFDCGLKGNKSYVCHYAAL
 GPENGGQVGASPLPDCAWQDYLDHKRQGRPSISFRKPKAKPTPPKRSSSLRKSDGNADISEKKEPKISS
 GQHLPHSSREMKLPLDFANTPSRMENANLPTKQEPSWINQSEQGIKEPQLDASDIPPFKDEVAESTHYAD
 LWLLNDLKTNDPYRSLSNSSTATGTTVIECIKSPESESQTSQSES RATTPSLPSVDNEFKLASPEKLAG
 LASPSSGYSSQSETPTSSFP TAFSGPLSPGGSKRKPKVPERKSSLQQP SLKDGTISLSKDLLELP IIPPT
 HLDLSALHNVLNKPFFHHRHPLHVFTHNKQNTVGETLRSNPPPLAITPTILKSVNLR SINKSEEVKQKEE
 NNTDLPYLEESTLTTAALSPSKIRPHTANKSVSRQYSTEDTILSFLDSSAVEMGPKDLHLEKNSTFDVKN
 RCDPETIT SAGSSLLDSNVTKDQVRETETEPENTPTKNCAFPTEGFQRVSAARPNDLDGKI IQYGPDP
 ETLEQVQKAPSAGLEEVAQPEVDVITSQSDSPTRATDVSNQFKHQFVMSRHHDKVPGTISYSEI TSVN
 SFPEKCSKQENI ASGISAKSASDNSKAETQGNVDEASLKESSPDDSI ISPLSEDSQAEAGV FVSPNK
 PRTTEDLFAVIHRSKRKVLGRKDSGDM SVRSKSRAPLSSSSSSASITSPSSNVTTPNSQRSPGLIYRNA
 KKSNTSNEEFKLLLLKKGSRSDSSYRMSATEILKSPILPKPPGELTAESPQSTDDAHQGSQGAEL SPLS
 PCSPRVNAEGFSSKSFATSASARVGRSRAPPAASSRYSVRCRLYNTPMQAI SEGETENSDGSPHDDRSS
 QSST

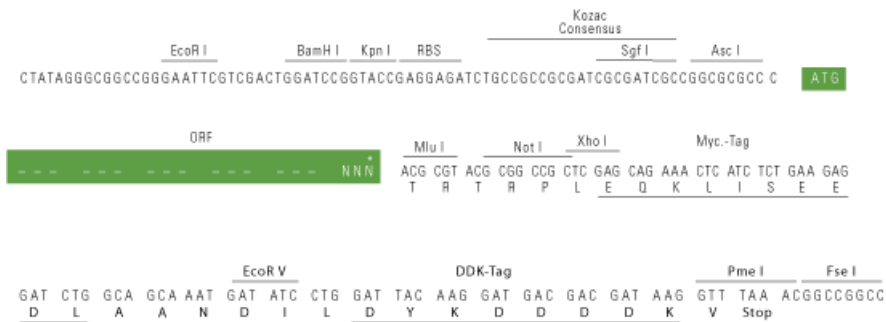
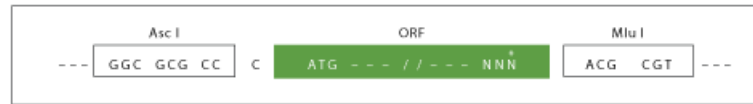
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

AscI-MluI

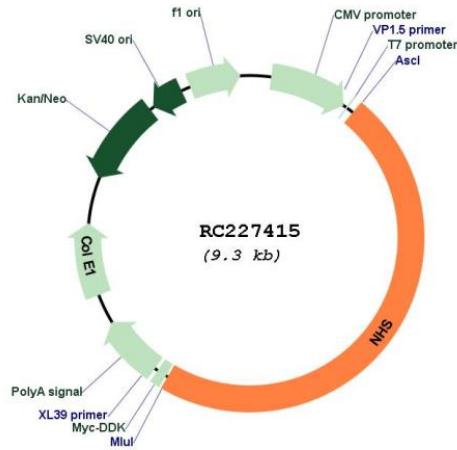
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001136024

ORF Size: 4422 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.

RefSeq: [NM_001136024.4](#)

RefSeq ORF: 4425 bp

Locus ID: 4810

UniProt ID: [Q6T4R5](#)

Cytogenetics: Xp22.2-p22.13

MW: 160.6 kDa

Gene Summary: This gene encodes a protein containing four conserved nuclear localization signals. The encoded protein functions in eye, tooth, craniofacial and brain development, and it can regulate actin remodeling and cell morphology. Mutations in this gene have been shown to cause Nance-Horan syndrome, and also X-linked cataract-40. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, May 2014]