

Product datasheet for RC200533

ESD (NM_001984) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ESD (NM_001984) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ESD
Synonyms:	FGH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200533 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCATTGAAGCAGATTTCCAGCAACAAGTGCTTTGGGGGATTGCAGAAAGTTTTGAACATGACAGTG
TTGAACTAACTGCAAAATGAAATTTGCTGTCTACTTACCACCAAAGGCAGAAACAGGAAAGTGCCTGC
ACTGTATTGGCTCTCAGGTTAACTTGCACAGAGCAAAATTTTATATCAAAATCTGGTTATCATCAGTCT
GCTTCAGAACATGGTCTTGTGTCATTGCTCCAGATACCAGCCCTCGTGGCTGCAATATTAAGGTGAAG
ATGAGAGCTGGGACTTTGGCACTGGTGTGGATTTTATGTTGATGCCACTGAAGATCCTTGAAAACCAA
CTACAGAAATGACTCTTATGTCACAGAGGAGCTTCCCAACTCATAAATGCCAATTTCCAGTGGATCCC
CAAAGGATGTCTATTTTTGGCCACTCCATGGGAGGTCATGGAGCTCTGATCTGTGCTTTGAAAAATCCTG
GAAAATACAAATCTGTGTCAGCATTTGCTCCAATTTGCAACCCTGTACTCTGTCCCTGGGGCAAAAAAGC
CTTTAGTGGATATTTGGGAACAGATCAAAGTAAATGGAAGGCTTATGATGCTACCCACCTTGTGAAATCC
TATCCAGGATCTCAGCTGGACATACTAATTGATCAAGGAAAGATGACCAGTTTCTTTTAGATGGACAGT
TACTCCCTGATAACTTCATAGCTGCCTGTACAGAAAAGAAAATCCCGTGTGTTTTTCGATTGCAAGAGGA
TTATGATCATAGCTACTTTCATTGCAACCTTATTACTGACCACATCAGACATCATGCTAAATACCTG
AATGCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC200533 protein sequence
 Red=Cloning site Green=Tags(s)

MALKQISSNKCFFGLQKVFHDSVELNCKMKFAVYLPKPAETGKCPALYWLSGLTCTEQNFISKSGYHQS
 ASEHGLVVIAPDTSRPGCNKIGEDSWDFGTGAGFYVDATEDPWKTNYRMYSYVTEELPQLINANFPVDP
 QRMSIFGHSMGGHALICALKNPGKYKVSFAFAPICNPVLCPWGKKAFSGYLGTDQSKWKAYDATHLVKS
 YPGSQLDILIDQKDDQFLLDGQLLPDNFIAACTEKKIPVVFRLLQEDYDHSYYFIATFITDHIRHHAKYL
 NA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6081_d05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001984

ORF Size: 846 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_001984.1](#), [NP_001975.1](#)

RefSeq Size: 1208 bp

RefSeq ORF: 849 bp

Locus ID: 2098

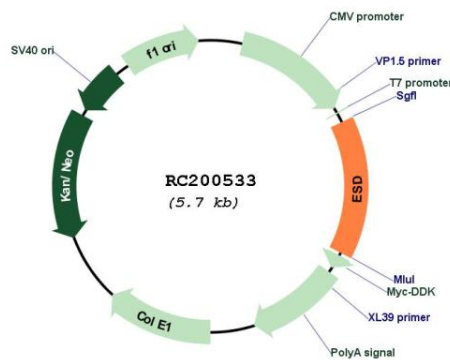
UniProt ID: [P10768](#)

Cytogenetics: 13q14.2

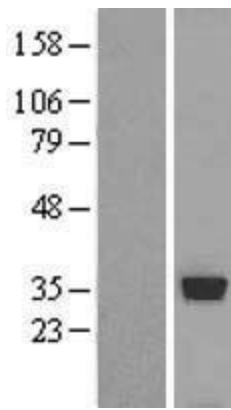
MW: 31.5 kDa

Gene Summary: This gene encodes a serine hydrolase that belongs to the esterase D family. The encoded enzyme is active toward numerous substrates including O-acetylated sialic acids, and it may be involved in the recycling of sialic acids. This gene is used as a genetic marker for retinoblastoma and Wilson's disease. [provided by RefSeq, Feb 2009]

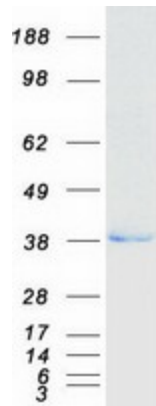
Product images:



Circular map for RC200533



Western blot validation of overexpression lysate (Cat# [LY419606]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200533 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ESD protein (Cat# [TP300533]). The protein was produced from HEK293T cells transfected with ESD cDNA clone (Cat# RC200533) using MegaTran 2.0 (Cat# [TT210002]).