

Product datasheet for **RC205983**

NSF (NM_006178) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NSF (NM_006178) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NSF
Synonyms:	SEC18; SKD2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC205983 ORF sequence

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCACGATCGCC

ATGGCGGGCCGGAGCATGCAAGCGGCAAGATGTCCTACAGATGAATTATCTTTAACCAATTGTGCAGTTG
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence: >RC205983 protein sequence
 Red=Cloning site Green=Tags(s)

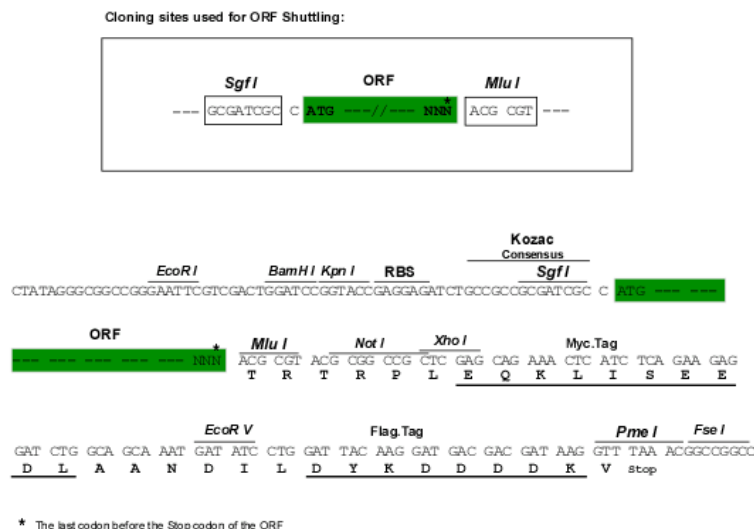
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Chromatograms: https://cdn.origene.com/chromatograms/mk6140_f07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006178

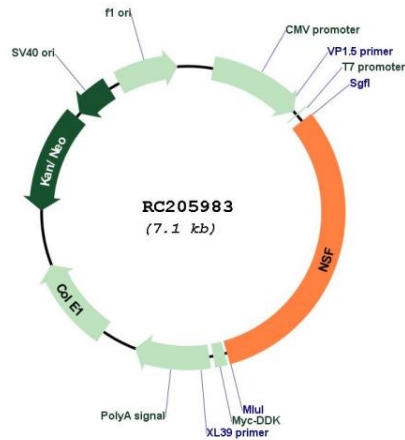
ORF Size: 2232 bp

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](#)

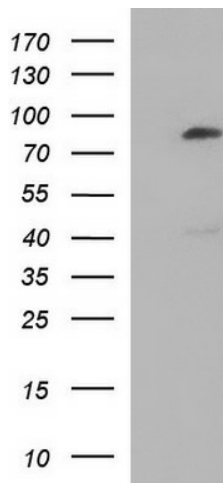
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<u>NM_006178.4</u>
RefSeq Size:	3995 bp
RefSeq ORF:	2235 bp
Locus ID:	4905
UniProt ID:	<u>P46459</u>
Cytogenetics:	17q21.31
Domains:	cdc48_N, AAA, AAA, cdc48_2
Protein Families:	Protease
MW:	82.6 kDa
Gene Summary:	Required for vesicle-mediated transport. Catalyzes the fusion of transport vesicles within the Golgi cisternae. Is also required for transport from the endoplasmic reticulum to the Golgi stack. Seems to function as a fusion protein required for the delivery of cargo proteins to all compartments of the Golgi stack independent of vesicle origin. Interaction with AMPAR subunit GRIA2 leads to influence GRIA2 membrane cycling (By similarity).[UniProtKB/Swiss-Prot Function]

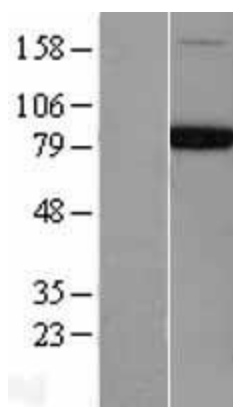
Product images:



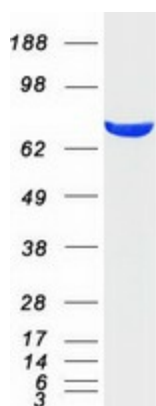
Circular map for RC205983



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NSF (Cat# RC205983, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-NSF (Cat# [TA590218]). Positive lysates [LY401861] (100ug) and [LC401861] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401861]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205983 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NSF protein (Cat# [TP305983]). The protein was produced from HEK293T cells transfected with NSF cDNA clone (Cat# RC205983) using MegaTran 2.0 (Cat# [TT210002]).