

Product datasheet for **RC208566**

FUCA2 (NM_032020) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FUCA2 (NM_032020) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FUCA2
Synonyms:	dJ20N2.5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC208566 representing NM_032020
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGCGGCCCCAGGAGCTCCCCAGGCTCGCGTTCGCGTTCGCTGTTGCTGTTGCTGCTGCTGCCGCCG
CGCCGTGCCCTGCCACAGCGCCACGCGCTTCGACCCACCTGGGAGTCCCTGGACGCCGCCAGCTGCC
CGCGTGGTTTGACCAGGCCAAGTTCGGCATCTTCATCCACTGGGAGTGTTCGCGTCCGACAGCTTCG
AGCGAGTGGTCTGGTGGTATTGGCAAAGGAAAAGATACCGAAGTATGTGGAATTTATGAAAGATAATT
ACCCTCTAGTTTCAAATATGAAGATTTGGACCACTATTTACAGCAAAATTTTTAATGCCAACCAAGT
GGCAGATATTTTTAGGCTCTGGTGCCAAATACATTGTCTTAACCTCCAACATCATGAAGCTTTACC
TTGTGGGGGTGAGAATATTCGTGGAAGTGAATGCCATAGATGAGGGGCCAAGAGGGACATTGTCAAGG
AACTTGAGGTAGCATTAGGAACAGAACTGACCTGCGTTCGACTGTACTATCCCTTTTGAATGGTT
TCATCCGCTCTTCTTGAGGATGAATCCAGTTCATTCCATAAGCGCAATTTCCAGTTTCTAAGACATTG
CCAGAGCTCTATGAGTTAGTGAACAATATCAGCCTGAGGTTCTGTGGTGGATGGTGACGGAGGAGCAC
CGGATCAATACTGGAACAGCACAGGCTTCTTGCCCTGGTATATAATGAAAGCCAGTTCGGGGCACAGT
AGTCACCAATGATCGTTGGGGAGCTGGTAGCATCTGTAAGCATGGTGGCTTCTATACCTGCAGTGATCGT
TATAACCCAGGACATCTTTGCCACATAAATGGGAAAAGTGCATGACAATAGACAACCTGCTCGGGGCT
ATAGGAGGGAAGCTGGAATCTCTGACTATCTTACAATTGAAGAATTGGTGAAGCAACTGTGAGAGACAGT
TTCATGTGGAGGAAATCTTTGATGAATATTGGGCCACACTAGATGGCACCATTCTGTAGTTTTGAG
GAGCGACTGAGGCAAGTGGGCTCTGGCTAAAAGTCAATGGAGAAGCTATTTATGAAACCTATACCTGCG
GATCCCAAGTACACTGTCACCCAGATGTGTGGTACACATCCAAGCCTAAAGAAAAATAGTCTATGC
CATTTTTCTTAAATGGCCACATCAGGACAGCTGTTCTTGGCCATCCCAAAGCTATTCTGGGGCAACA
GAGGTGAAACTACTGGGCCATGGACAGCACTTAAGTGGATTTCTTTGGAGCAAAATGGCATTATGGTAG
AACTGCCACAGCTAACCATTCATCAGATGCCGTGTAATGGGGCTGGGCTCTAGCCCTAACTAATGTGAT
C

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC208566 representing NM_032020
Red=Cloning site Green=Tags(s)

MRPQELPRLAFPLLLLLLLLLPPPPCPAHSATRFDPTWESLDARQLPAWFDQAKFGIFIHWGVFSVPSFG
SEWFWWWYQKEKIPKYVEFMKDNYPSPFKYEDFGPLFTAKFFNANQWADIFQASGAKYIVLTSKHHEGFT
LWGSEYSWNWNAIDEGPKRDIVKELEVAIRNRDRLRFGLYYSLEFWFHPLFLEDESSSFHKRQFPVSKTL
PELYELVNNYQPEVLWSDGDDGAPDQYWNSTGFLAWLYNESPVVGTVVTNDRWGAGSICKHGGFYTCSDR
YNPGHLLPHKWENCMIDKLSWGYRREAGISDYLTIEELVKQLVETVSCGNLLMNIPTLDGTISVVF
ERLRQVGSWLKVNGEAIYETYTWRSQNDVTPDVVWYTSKPKELVYAIFLKWPTSGQLFLGHPKAILGAT
EVKLLGHGQPLNWIISLEQNGIMVELPQLTIHQMPCKWGWALALTNVI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg2917_e01.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_032020

ORF Size: 1401 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_032020.2](#)

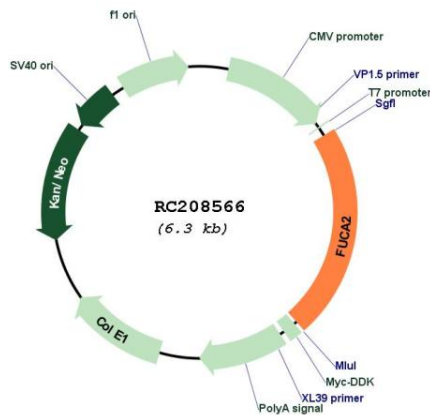
RefSeq Size: 2098 bp

RefSeq ORF: 1404 bp

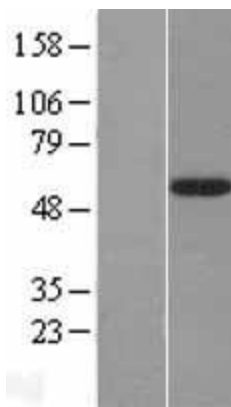
Locus ID: 2519

UniProt ID:	<u>Q9BTY2</u>
Cytogenetics:	6q24.2
Domains:	Alpha_L_fucos
Protein Families:	Druggable Genome, Secreted Protein
Protein Pathways:	Other glycan degradation
MW:	53.9 kDa
Gene Summary:	This gene encodes a plasma alpha-L-fucosidase, which represents 10-20% of the total cellular fucosidase activity. The protein is a member of the glycosyl hydrolase 29 family, and catalyzes the hydrolysis of the alpha-1,6-linked fucose joined to the reducing-end N-acetylglucosamine of the carbohydrate moieties of glycoproteins. This enzyme is essential for Helicobacter pylori adhesion to human gastric cancer cells. [provided by RefSeq, Aug 2010]

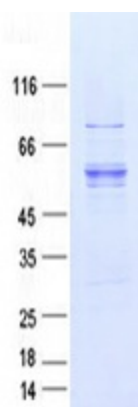
Product images:



Circular map for RC208566



Western blot validation of overexpression lysate (Cat# [LY410345]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208566 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FUCA2 protein (Cat# [TP308566]). The protein was produced from HEK293T cells transfected with FUCA2 cDNA clone (Cat# RC208566) using MegaTran 2.0 (Cat# [TT210002]).