

Product datasheet for RC210114

OBP2A (NM_014582) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OBP2A (NM_014582) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	OBP2A
Synonyms:	hOBPIIa; LCN13; OBP; OBP2C; OBPIIa
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210114 representing NM_014582 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGACCTGTTCTGGGTGTCACGCTCGGCCCTGGCCGCTGCCCTGTCCTTCACCTGGAGGAGGAGG
ATATCACAGGGACCTGGTACGTGAAGGCCATGGTGGTCGATAAGGACTTCCGGAGGACAGGAGGCCAG
GAAGGTGTCCCCAGTGAAGGTGACAGCCCTGGGCGGTGGGAACCTGGAAGCCACGTTACCTTCATGAGG
GAGGATCGGTGCATCCAGAAGAAAATCCTGATGCGGAAGACGGAGGAGCCTGGCAAATTCAGCGCCTATG
GGGCAGGAAGCTCATATACCTGCAGGAGCTGCCCGGACGGACGACTACGTCTTTACTGCAAAGACCA
GCGCCGTGGGGCCTGCGCTACATGGGAAAGCTTGTGGTAGGAATCCTAATACCAACCTGGAGGCCCTG
GAAGAATTTAAGAAATTGGTGCAGCACAAAGGACTCTCGGAGGAGGACATTTTCATGCCCTGCAGACGG
GAAGCTGCGTTCTCGAACAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC210114 representing NM_014582 Red=Cloning site Green=Tags(s)
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MKTLFLGVTGLLAAALSFTLEEEDITGTWYVKAMVVDKDFPEDRRPRKVPVKVVALGGNLEATFTFMR
EDRCIQKKILMRKTEEPGKFSAYGGRKLIYLQELPGTDDYVFYCKDQRRGGLRYMGKLVGRNPNTNLEAL
EEFKKLVQHKGLSEEDIFMPLQTGSCVLEH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

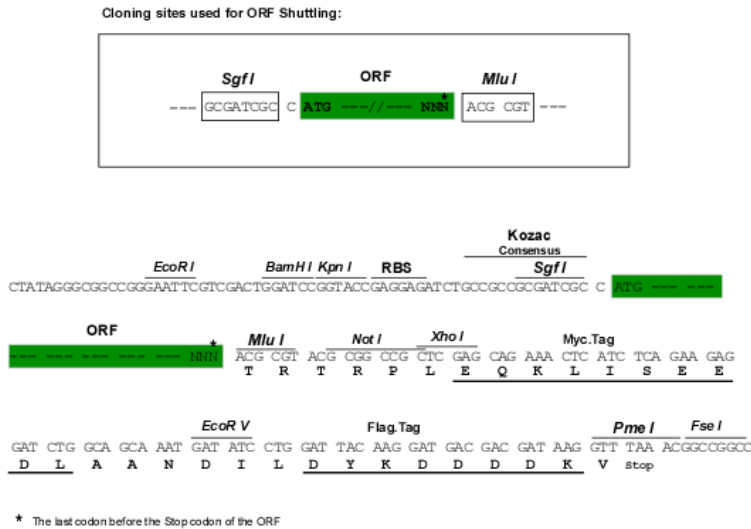
Chromatograms:	https://cdn.origene.com/chromatograms/mg2861_a01.zip
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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_014582

ORF Size: 510 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_014582.3](#)

RefSeq Size: 689 bp

RefSeq ORF: 513 bp

Locus ID: 29991

UniProt ID: [Q9NY56](#)

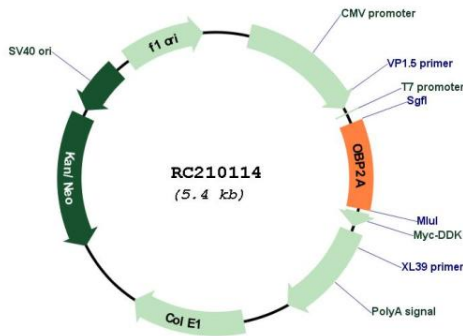
Cytogenetics: 9q34.3

Protein Families: Secreted Protein

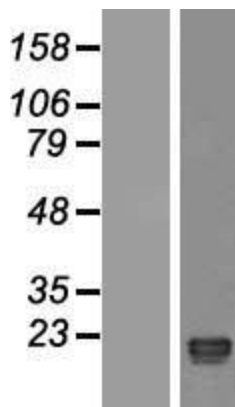
MW: 19.32 kDa

Gene Summary: This gene encodes a small extracellular protein belonging to the lipocalin superfamily. The protein is thought to transport small, hydrophobic, volatile molecules or odorants through the nasal mucus to olfactory receptors, and may also function as a scavenger of highly concentrated or toxic odors. The protein is expressed as a monomer in the nasal mucus, and can bind diverse types of odorants with a higher affinity for aldehydes and fatty acids. This gene and a highly similar family member are located in a cluster of lipocalin genes on chromosome 9. Alternatively spliced transcript variants have been described, but their biological validity has not been determined. [provided by RefSeq, Jul 2008]

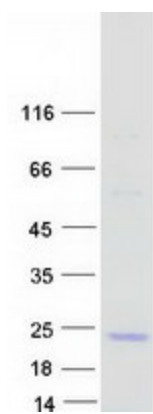
Product images:



Circular map for RC210114



Western blot validation of overexpression lysate (Cat# [LY415182]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210114 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified OBP2A protein (Cat# [TP310114]). The protein was produced from HEK293T cells transfected with OBP2A cDNA clone (Cat# RC210114) using MegaTran 2.0 (Cat# [TT210002]).