

## 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)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGCATCGCC

ATGAAGACCTGTTCTGGGTGTACGCTCGGCCTGGCCGCTGCCCTGTCTTCACCTGGAGGAGGAGG  
 ATATCACAGGGACCTGGTACGTGAAGGCCATGGTGGTCGATAAGGACTTTCGGAGGACAGGAGGCCAG  
 GAAGGTGTCCCACTGAAGGTGACAGCCCTGGGCGGTGGGAACCTGGAAGCCACGTTACCTTCATGAGG  
 GAGGATCGGTGCATCCAGAAGAAATCCTGATGCGGAAGACGGAGGAGCCTGGCAAATTCAGCGCCTATG  
 GGGGACGAAGCTCATATACCTGCAGGAGCTGCCCGGACGGACGACTACGTCTTTACTGCAAAGACCA  
 GCGCCGTGGGGGCTGCGCTACATGGGAAAGCTTGTGGTAGGAATCCTAATACCAACCTGGAGGCCCTG  
 GAAGAATTTAAGAAATGGTGCAGCACAAAGGACTCTCGGAGGAGGACATTTTCATGCCCTGCAGACGG  
 GAAGCTGCGTTCTCGAACAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC210114 representing NM\_014582  
 Red=Cloning site Green=Tags(s)

MKTLFLGVTGLAAALSFTLEEEDITGTWYVKAMVVDKDFPEDRRPRKVPVKVTALGGNLEATFTFMR  
 EDRCIQKILMRKTEEPGKFSAYGGRKLIYLQELPGTDDYVFYCKDQRRGGLRYMGKLVGRNPNTNLEAL  
 EEFKKLVQHKGLSEEDIFMPLQTGSCVLEH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

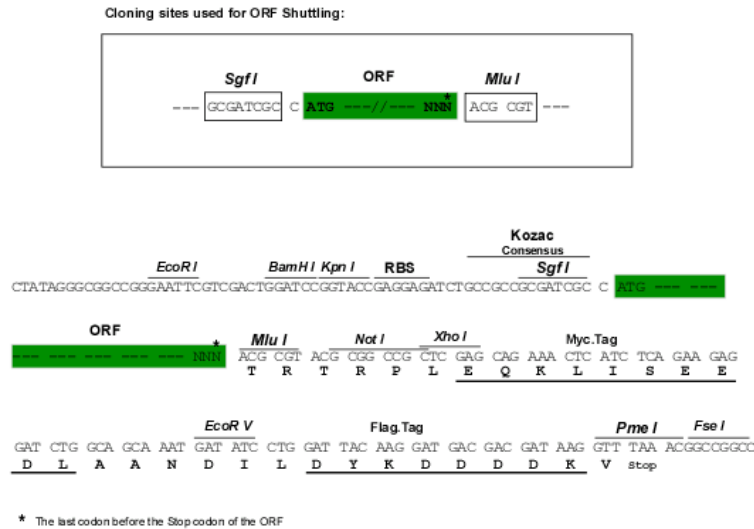
**Chromatograms:** [https://cdn.origene.com/chromatograms/mg2861\\_a01.zip](https://cdn.origene.com/chromatograms/mg2861_a01.zip)



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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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_014582.3](#)

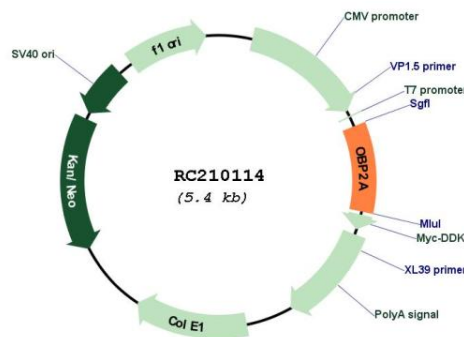
**RefSeq Size:** 689 bp

**RefSeq ORF:** 513 bp

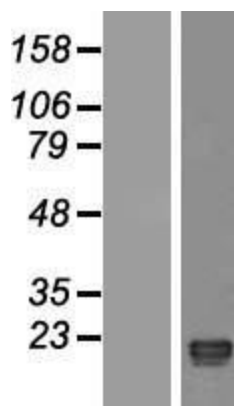
**Locus ID:** 29991  
**UniProt ID:** [Q9NY56](#)  
**Cytogenetics:** 9q34.3  
**Protein Families:** Secreted Protein  
**MW:** 19.32 kDa

**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]

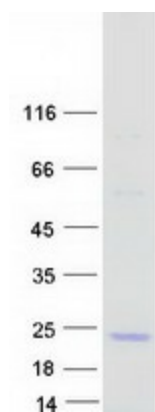
## Product images:



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]).