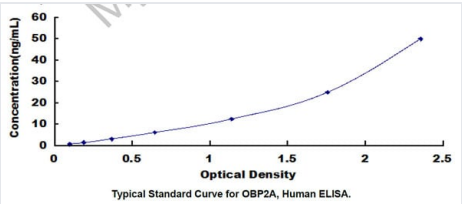
Odorant Binding Protein 2a (OBP2A) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	Odorant Binding Protein 2A (OBP2A), ELISA Kit
Full Product Name	Human Odorant Binding Protein 2A (OBP2A) ELISA Kit
Product Gene Name	OBP2A elisa kit
Product Synonym Names	OBP2-A; OBP; OBP2C; OBPIIa; hOBPIIa
Species Reactivity	Human
Assay Type	Quantitative Sandwich
Samples	Human saliva, tissue homogenates, cell lysates and other biological fluids
Detection Range	0.78-50ng/mL
Sensitivity	< 0.32ng/mL
Specificity	This assay has high sensitivity and excellent specificity for detection of OBP2A. No significant cross-reactivity or interference between OBP2A and analogues was observed.
Preparation and Storage	The stability of kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. To minimize extra influence on the performance, operation procedures and lab conditions, especially room temperature, air humidity, incubator temperature should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same operator from the beginning to the end.
Inter-assay Precision	Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level OBP2A were tested on 3 different plates, 8 replicates in each plate. CV(%) = SD/meanX100. Inter-Assay: CV<12%
Intra-assay Precision	Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level OBP2A were tested 20 times on one plate, respectively. Intra-Assay: CV<10%
Molecular Weight	26,014 Da
OMIM	164320
Supply Chain Verification	Manufactured in a lab with traceable raw materials. Bulk orders can typically be prepared to the customer's specifications, please inquire.
Product Categories/Family for OBP2A elisa kit	Ophthalmology & Otorhinolaryngology
ISO Certification	Manufactured in an ISO 9001:2015 and ISO 13485:2016 Certified Laboratory.
Related Product Information for OBP2A elisa kit	Principle of the Assay: The microplate provided in this kit has been pre-coated with an antibody specific to OBP2A. Standards or samples are then added to the appropriate microplate wells with a biotin-conjugated antibody specific to OBP2A. Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain OBP2A, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm ± 10nm. The concentration of OBP2A in the samples is then determined by comparing the O.D. of the samples to the standard curve. Intended Uses: The kit is a sandwich enzyme immunoassay for in vitro quantitative measurement of OBP2A in human saliva, tissue homogenates, cell lysates and other biological fluids.
Other Notes	Small volumes of OBP2A elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

Searchable Terms for OBP2A purchase	MBS2024980 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Odorant Binding Protein 2A (OBP2A) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing OBP2A. The ELISA analytical biochemical technique of the MBS2024980 kit is based on OBP2A antibody-OBP2A antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect OBP2A antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, OBP2A. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of OBP2A elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for OBP2A. It may not necessarily be applicable to this product.

NCBI GI #	47479498
NCBI GeneID	29991
NCBI Accession #	AAH69563.1
UniProt Secondary Accession #	Q5T8A3; Q9NY50; Q9NY53; Q9NY54; Q9NY55
UniProt Related Accession #	Q9NY56
NCBI Official Full Name	Odorant binding protein 2A
NCBI Official Synonym Full Names	odorant binding protein 2A
NCBI Official Symbol	OBP2A
NCBI Official Synonym Symbols	OBP; LCN13; OBP2C; OBPIIa; hOBPIIa
UniProt Protein Name	Odorant-binding protein 2a
UniProt Synonym Protein Names	Odorant-binding protein IIa; OBPIIa
Protein Family	Odorant-binding protein
UniProt Gene Name	OBP2A
UniProt Synonym Gene Names	OBPIIa
UniProt Entry Name	OBP2A_HUMAN
NCBI Protein Information	odorant-binding protein 2a
NCBI Summary for OBP2A	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]

UniProt Comments for OBP2A	OBP2A: Probably binds and transports small hydrophobic volatile molecules with a higher affinity for aldehydes and large fatty acids. Belongs to the calycin superfamily. Lipocalin family. 4 isoforms of the human protein are produced by alternative splicing. Protein type: Secreted, signal peptide; Secreted Chromosomal Location of Human Ortholog: 9q34 Cellular Component: extracellular region Molecular Function: odorant binding Biological Process: sensory perception of chemical stimulus; transport; response to stimulus; sensory perception of smell
Research Articles on OBP2A	**1.** Lys112 is the major determinant for governing hOBP-2A specificity towards aldehydes and small carboxylic acids.
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