

## **Product datasheet for TL312408**

## OriGene Technologies, Inc.

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## HLA DOB (HLA-DOB) Human shRNA Plasmid Kit (Locus ID 3112)

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: HLA DOB (HLA-DOB) Human shRNA Plasmid Kit (Locus ID 3112)

**Locus ID:** 3112

**Synonyms:** DOB; HLA\_DOB

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

Components: HLA-DOB - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

3112). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: <u>BC020226, NM 002120, NM 002120.1, NM 002120.2, NM 002120.3, BC006097, BC006097.1</u>

BM152694, NM 002120.4

UniProt ID: P13765

Summary: HLA-DOB belongs to the HLA class II beta chain paralogues. This class II molecule is a

heterodimer consisting of an alpha (DOA) and a beta chain (DOB), both anchored in the membrane. It is located in intracellular vesicles. DO suppresses peptide loading of MHC class II molecules by inhibiting HLA-DM. Class II molecules are expressed in antigen presenting cells (APC: B lymphocytes, dendritic cells, macrophages). The beta chain is approximately 26-28 kDa and its gene contains 6 exons. Exon one encodes the leader peptide, exons 2 and 3 encode the two extracellular domains, exon 4 encodes the transmembrane domain and exon

5 encodes the cytoplasmic tail. [provided by RefSeg, Jul 2008]

**shRNA Design:** These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.





## Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).