

Product datasheet for RC203185L4

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HEXA (NM_000520) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: HEXA (NM_000520) Human Tagged Lenti ORF Clone

Tag: mGFP
Symbol: HEXA
Synonyms: TSD

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

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

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC203185).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_000520

ORF Size: 1587 bp



HEXA (NM_000520) Human Tagged Lenti ORF Clone - RC203185L4

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: <u>NM 000520.3</u>

 RefSeq Size:
 2437 bp

 RefSeq ORF:
 1590 bp

 Locus ID:
 3073

 UniProt ID:
 P06865

Cytogenetics: 15q23

Domains: Glyco_hydro_20

Protein Families: Druggable Genome

Protein Pathways: Amino sugar and nucleotide sugar metabolism, Glycosaminoglycan degradation,

Glycosphingolipid biosynthesis - ganglio series, Glycosphingolipid biosynthesis - globo series,

Lysosome, Metabolic pathways, Other glycan degradation

MW: 60.7 kDa

Gene Summary: This gene encodes a member of the glycosyl hydrolase 20 family of proteins. The encoded

preproprotein is proteolytically processed to generate the alpha subunit of the lysosomal enzyme beta-hexosaminidase. This enzyme, together with the cofactor GM2 activator protein, catalyzes the degradation of the ganglioside GM2, and other molecules containing terminal Nacetyl hexosamines. Mutations in this gene lead to an accumulation of GM2 ganglioside in

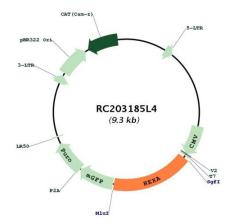
neurons, the underlying cause of neurodegenerative disorders termed the GM2

gangliosidoses, including Tay-Sachs disease (GM2-gangliosidosis type I). Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is

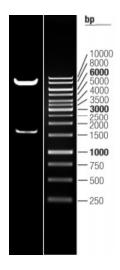
proteolytically processed. [provided by RefSeq, Jan 2016]



Product images:



Circular map for RC203185L4



Double digestion of RC203185L4 using Sgfl and Mlul $\,$