

## Product datasheet for RC201223

### HIGD2A (NM\_138820) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** HIGD2A (NM\_138820) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** HIGD2A  
**Synonyms:** RCF1b  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RC201223 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGCGACTCCCGCCCTGTGATTCCGGAGGTCCCCTTTGAACCATCGAAGCCTCCAGTCATTGAGGGGC  
TGAGCCCCACTGTTTACAGGAATCCAGAGAGTTTCAAGGAAAAGTTCGTTTCGCAAGACCCGCGAGAACC  
GGTGGTACCCATAGGTTGCCTGGCCACGGCGGCCGCCCTCACCTACGGCCTCTACTCCTCCACCGGGC  
AACAGCCAGCGCTCTCAGCTCATGATGCGCACCCGGATCGCCGCCAGGGTTTCACGGTTCGAGCCATCT  
TGCTGGTCTGGCTGTCCTGCTATGAAGTCTCGACCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC201223 protein sequence  
Red=Cloning site Green=Tags(s)

MATPGPVIPEVPFEPSPVIEGLSPTVYRNPEFKEKFRVKTRENPVPIGCLATAAALTYGLYSFHRG  
NSQRSQLMMRTRIAAQGFTVAAILLGLAVTAMKSRP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6409\\_b12.zip](https://cdn.origene.com/chromatograms/mk6409_b12.zip)

**Restriction Sites:** Sgfl-MluI

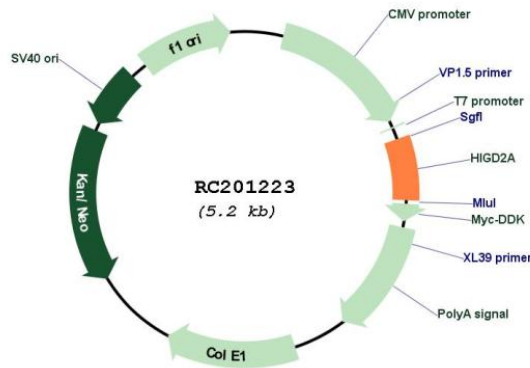


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Cloning Scheme:



Plasmid Map:



ACCN:

NM\_138820

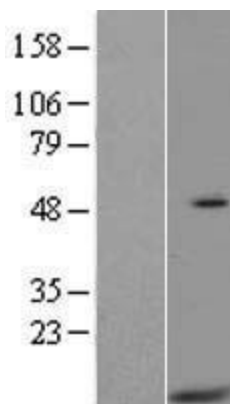
ORF Size:

318 bp

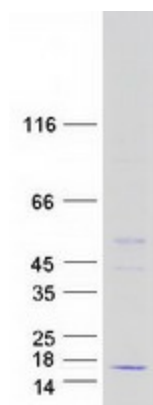
OTI Disclaimer:

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](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_138820.4</a>
<b>RefSeq Size:</b>	628 bp
<b>RefSeq ORF:</b>	321 bp
<b>Locus ID:</b>	192286
<b>UniProt ID:</b>	<a href="#">Q9BW72</a>
<b>Cytogenetics:</b>	5q35.2
<b>Domains:</b>	HIG_1_N
<b>Protein Families:</b>	Transmembrane
<b>MW:</b>	11.5 kDa
<b>Gene Summary:</b>	The protein encoded by this gene is a subunit of the cytochrome c oxidase complex (complex IV), which is the terminal enzyme in the mitochondrial respiratory chain. The encoded protein is an inner mitochondrial membrane protein and is a functional ortholog of the yeast respiratory supercomplex factor 1 (Rcf1). In mouse, the orthologous protein enhances cell survival under conditions of hypoxia. [provided by RefSeq, Sep 2016]

**Product images:**

Western blot validation of overexpression lysate (Cat# [LY408465]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201223 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HIGD2A protein (Cat# [TP301223]). The protein was produced from HEK293T cells transfected with HIGD2A cDNA clone (Cat# RC201223) using MegaTran 2.0 (Cat# [TT210002]).