

#### OriGene Technologies, Inc.

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# Product datasheet for RC225139

## Cytochrome b reductase 1 (CYBRD1) (NM\_001127383) Human Tagged ORF Clone

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Cytochrome b reductase 1 (CYBRD1) (NM_001127383) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cytochrome b reductase 1
Synonyms:	CYB561A2; DCYTB; FRRS3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	<pre>&gt;RC225139 representing NM_001127383 Red=Cloning site Blue=ORF Green=Tags(s)</pre>
	TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCC <mark>GCGATCGC</mark> C
	ATGGCCATGGAGGGCTACTGGCGCTTCCTGGCGCTGGCGGGTCGGCACTGCTCGTCGGCTTCCTGTCGG TGATCTTCGCCCTCGTCTGGGTCCTCCACTACCGAGAGGGGGCTTGGCTGGGATGGGAGCGCACTAGAGTT TAACTGGCACCCAGTGCTCATGGTCACCGGCTTCGTCTTCATCCAGGGCATCGCTTCTTTCAGGTTTTTC AGTCTTTCTGCTTCCATGGGCTCCGCTTTCTCTCCGAGCATTTCTCATGCCCATACATGTTTATTCTGGA ATTGTCATCTTTGGAACAGTGATTGCAACAGCACTTATGGGATTGACAGAGAAACTGATTTTTTCCCTGA GAGATCCTGCATACAGTACATTCCCGCCAGAAGGTGTTTTCGTAAATACGCTTGGCCTTCTGATCCTGGT GTTCGGGGCCCTCATTTTTTGGATAGTCACCAGACCGCAATGGAAACGTCC
	ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGG <b>TTTAA</b>
Protein Sequence:	>RC225139 representing NM_001127383 <mark>Red</mark> =Cloning site Green=Tags(s)
	MAMEGYWRFLALLGSALLVGFLSVIFALVWVLHYREGLGWDGSALEFNWHPVLMVTGFVFIQGIASFRFF SLSASMGSAFSPSISHAHTCLFWNCHLWNSDCNSTYGIDRETDFFPERSCIQYIPARRCFRKYAWPSDPG VRGPHFLDSHQTAMETS
	TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Chromatograms:	https://cdn.origene.com/chromatograms/mg3381_a09.zip



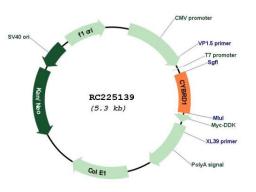
This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US **Cytochrome b reductase 1 (CYBRD1) (NM\_001127383) Human Tagged ORF Clone – RC225139** 

Restriction Sites:	Sgfl-Mlul
Cloning Scheme:	Cloning sites used for ORF Shuttling: Sgf1 ORF Miu I GCGATOGC C ATG MINI ACG CGT
	$\frac{EcoRI}{EcoRI} = BamHI Kpn I RBS} = Sgf I Consensus Sgf I ConsensI Consensus Sgf I Consensu$
	Ecord V     Flag Tag     Pme I     Fse I       GAT CTG GCA GCA AAT GAT ATC CTG GAT TAC AAG GAT GAC GAC GAT AAG CTT TAA ACGGCCGGGCC     D     L     A     N     D     I     L     D     Y     K     D     D     D     K     V     stop
	* The last codon before the Stop codon of the ORF
ACCN:	NM_001127383
ORF Size:	471 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. <u>More info</u>
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:	<ol> <li>Centrifuge at 5,000xg for 5min.</li> <li>Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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>
RefSeq:	<u>NM 001127383.2</u>
efSeq ORF:	474 bp
ocus ID:	79901
JniProt ID:	<u>Q53TN4</u>
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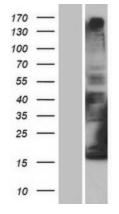
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	Cytochrome b reductase 1 (CYBRD1) (NM_001127383) Human Tagged ORF Clone – RC225139
Cytogenetics:	2q31.1
Protein Families:	Transmembrane
MW:	17.7 kDa
Gene Summary:	This gene is a member of the cytochrome b(561) family that encodes an iron-regulated protein. It highly expressed in the duodenal brush border membrane. It has ferric reductase activity and is believed to play a physiological role in dietary iron absorption. [provided by RefSeq, Jul 2008]

## **Product images:**



Circular map for RC225139



Western blot validation of overexpression lysate (Cat# [LY426766]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225139 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

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