

Product datasheet for **RC223027**

GYPB (NM_002100) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: GYPB (NM_002100) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: GYPB
Synonyms: CD235b; GPB; GYP; GYPA; MNS; PAS-3; SS
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC223027 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTATGGAAAAATAATCTTTGTATTACTATTGTGAGAAATTGTGAGCATATCAGCATTAAAGTACCACTG
AGGTGGCAATGCACACTTCAACCTCTTCTTCAGTCACAAAGAGTTACATCTCATCAGACAAATGGAGA
AACGGGACAACCTGTCCATCGTTTCACTGTACCAGCTCCTGTAGTGATAATACTCATTATTTGTGTGTG
ATGGCTGGTATTATTGGAACGATCCTTAATTTCTTACAGTATTCGCCACTGATAAAGGCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC223027 protein sequence
Red=Cloning site Green=Tags(s)
MYGKIIFVLLLSEIVSISALSTTEVAMHTSTSSSVTKSYISSQTNGETGQLVHRFTVPAPVVIIILICV
MAGIIGTILLISYSIRRLIKA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6441_f08.zip

Restriction Sites: Sgfl-MluI



[View online »](#)

Cloning Scheme:


ACCN: NM_002100

ORF Size: 273 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](#)

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: [NM_002100.6](#)

RefSeq Size: 527 bp

RefSeq ORF: 276 bp

Locus ID: 2994

UniProt ID: [P06028](#)

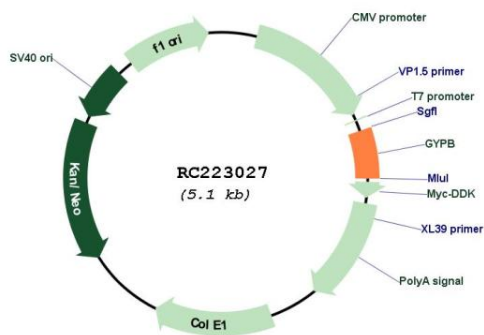
Cytogenetics: 4q31.21

Domains: Glycophorin_A

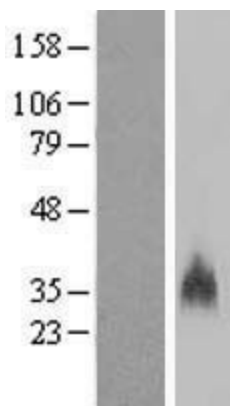
MW: 9.8 kDa

Gene Summary: Glycophorins A (GYPA) and B (GYPB) are major sialoglycoproteins of the human erythrocyte membrane which bear the antigenic determinants for the MN and Ss blood groups. GYPB gene consists of 5 exons and has 97% sequence homology with GYPA from the 5' UTR to the coding sequence encoding the first 45 amino acids. In addition to the M or N and S or s antigens, that commonly occur in all populations, about 40 related variant phenotypes have been identified. These variants include all the variants of the Miltenberger complex and several isoforms of Sta; also, Dantu, Sat, He, Mg, and deletion variants Ena, S-s-U- and Mk. Most of the variants are the result of gene recombinations between GYPA and GYPB. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Jan 2015]

Product images:



Circular map for RC223027



Western blot validation of overexpression lysate (Cat# [LY419536]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223027 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).