

Product datasheet for **RG208121**

UBL4A (NM_014235) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: UBL4A (NM_014235) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: UBL4A
Synonyms: DX254E; DXS254E; G6PD; GDX; GET5; MDY2; TMA24; UBL4
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG208121 representing NM_014235
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGATCGCC

ATGCAGCTGACGGTGAAGGCGCTGCAGGGCCGCGAGTGCAGCCTGCAGGTGCCAGAGGACGAGCTGGTGT
CCACGCTGAAGCAGCTGGTCTCCGAGAAGCTGAACGTCCCAGTGCGCCAGCAGCGGCTGCTGTTCAAGGG
CAAGGCCCTGGCAGATGGGAAACGACTCTCGATTATAGCATCGGGCCCAACTCCAAGCTCAACCTAGTG
GTCAAACCCCTGGAGAAGGTGCTACTAGAAGAAGGCGAGGCCAGAGGCTGGCCGACTCCCCACCCCGC
AGGTCTGGCAGCTGATCTCCAAAGTCTTGCCCCGCCACTTCAGTGCGGCAGATGCCAGCAGGGTCTGGA
ACAGCTACAGAGGATTACGAGAGGTCCCTGAGTCGCCTGACGCTGGACGACATCGAACGTTGGCCAGC
CGCTTCTGCACCCTGAAGTGACTGAGACAATGGAGAAGGGCTTCTCAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG208121 representing NM_014235
Red=Cloning site Green=Tags(s)

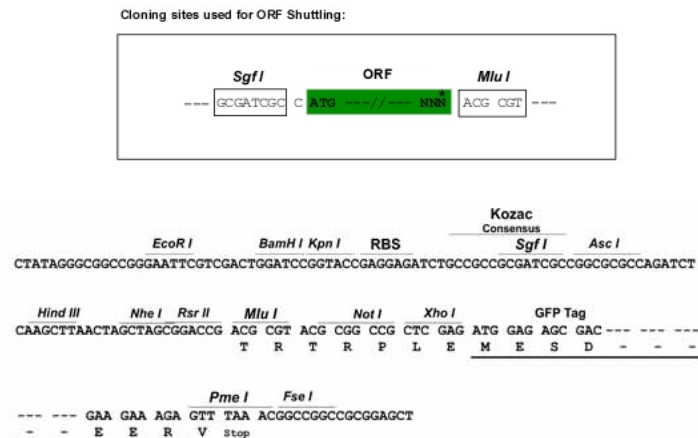
MQLTVKALQGRCESLQVPEDELVSTLKQLVSEKLNVPVRQRRLLFKGKALADGKRLSDYSIGPNSKLNLV
 VKPLEKVLLEEQAQRLADSPPPQVWQLISKVLARHFSAADASRVLEQLQRDYERSLSRLTLDDIERLAS
 RFLHPEVTETMEKGFSK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_014235

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. [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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

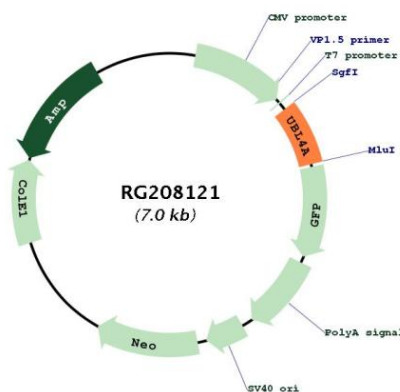
RefSeq: [NM_014235.5](#)

RefSeq Size: 2322 bp

RefSeq ORF: 474 bp

Locus ID:	8266
UniProt ID:	P11441
Cytogenetics:	Xq28
Domains:	UBQ
Protein Families:	Druggable Genome
Gene Summary:	<p>As part of a cytosolic protein quality control complex, the BAG6/BAT3 complex, maintains misfolded and hydrophobic patches-containing proteins in a soluble state and participates to their proper delivery to the endoplasmic reticulum or alternatively can promote their sorting to the proteasome where they undergo degradation (PubMed:20676083, PubMed:21636303, PubMed:21743475, PubMed:28104892). The BAG6/BAT3 complex is involved in the post-translational delivery of tail-anchored/type II transmembrane proteins to the endoplasmic reticulum membrane. Recruited to ribosomes, it interacts with the transmembrane region of newly synthesized tail-anchored proteins and together with SGTA and ASNA1 mediates their delivery to the endoplasmic reticulum (PubMed:20676083, PubMed:28104892, PubMed:25535373). Client proteins that cannot be properly delivered to the endoplasmic reticulum are ubiquitinated and sorted to the proteasome (PubMed:28104892). Similarly, the BAG6/BAT3 complex also functions as a sorting platform for proteins of the secretory pathway that are mislocalized to the cytosol either delivering them to the proteasome for degradation or to the endoplasmic reticulum (PubMed:21743475). The BAG6/BAT3 complex also plays a role in the endoplasmic reticulum-associated degradation (ERAD), a quality control mechanism that eliminates unwanted proteins of the endoplasmic reticulum through their retrotranslocation to the cytosol and their targeting to the proteasome. It maintains these retrotranslocated proteins in an unfolded yet soluble state condition in the cytosol to ensure their proper delivery to the proteasome (PubMed:21636303).[UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for RG208121