

Product datasheet for **RG212304**

CRYL1 (NM_015974) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CRYL1 (NM_015974) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CRYL1
Synonyms:	GDH; gul3DH; HEL30; lambda-CRY
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG212304 representing NM_015974 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGGCGTCCTCCGCGCCGGCTGCGTGGTGATCGTTGGCAGTGGAGTCATTGGGCGAAGCTGGGCCATGC
TGTTTGCCAGTGGAGGCTTCCAGGTGAACTCTATGACATTGAGCAACAGCAGATAAGGAACGCCCTGGA
AAACATCAGAAAGGAGATGAAGTTGCTGGAGCAGGCAGGTTCTCTGAAAGGCTCCCTGAGTGTGGAAGAG
CAGCTGCACTCATCAGTGGTTGTCCCAATATCCAAGAAGCAGTAGAGGGTGCCATGCACATTCAAGGAAT
GTGTTCCAGAAGATCTAGAACTGAAGAAGAAGATTTTGTCTAGTTAGATTCCATCATTGATGATCGAGT
GATCTTAAGCAGTTCCACTTCTTGTCTCATGCCTTCCAAGTTGTTTGTCTGGCTTGGTCCATGTGAAGCAA
TGCATCGTGGCTCATCCTGTGAATCCGCCATACTACATCCCGCTGGTTGAGCTGGTCCCCACCCGAGAG
CGGCCCTACGACAGTGGACAGAACCCACGCCCTGATGAAGAAGATTGGACAGTGGCCCATGCGAGTCCA
GAAGGAGGTGGCCGGCTTCGTTCTGAACCGCTGCAATATGCAATCATCAGCAGGCCTGGCGGCTAGTG
GAGGAAGGAATCGTGTCTCCTAGTGACCTGGACCTGTCATGTCAGAAGGGTTGGCATGCGGTATGTCAT
TCATTGGACCCCTGGAACCATGCATCTCAATGCAGAAGGTATGTTAAGCTACTGCGACAGATACAGCGA
AGGCATAAAACATGTCTACAGACTTTTGGACCATTCAGAGTTTCCAGGGCCACTGCTGAGAAGGTT
AACCAGGACATGTGCATGAAGTCCCTGATGACCCGGAGCACTTAGCTGCCAGGAGGCAGTGGAGGGACG
AGTGCCCTCATGAGACTCGCCAAGTTGAAGAGTCAAGTGCAGCCCCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG212304 representing NM_015974
 Red=Cloning site Green=Tags(s)

MASSAAGCVVIVGSGVIGRSWAMLFASGGFQVKLYDIEQQQIRNALENIRKEMKLLQAGSLKGSLSVEE
 QLSLISGCPNIQEAVEGAMHIQECVPEDLELKKKIFAQLDSIIDRVILSSSTSCLMPKSLFAGLVHVQKQ
 CIVAHPVNPYYIPLVELVPHPETAPTTVDRTALMKKIGQCPMRVQKEVAGFVLNRLQYAIISEAWRLV
 EEGIVSPSDLDLVMSEGLGMRYAFIGPLETMHLNAEGMLSYCDRYSEGIKHLVLTFTGPIPEFSRATAEKV
 NQDMCMKVPDDPEHLAARRQWRDECLMRLAKLKSQVQPQ

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_015974

ORF Size: 957 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_015974.3](#)

RefSeq Size: 1516 bp

RefSeq ORF: 960 bp

Locus ID: 51084

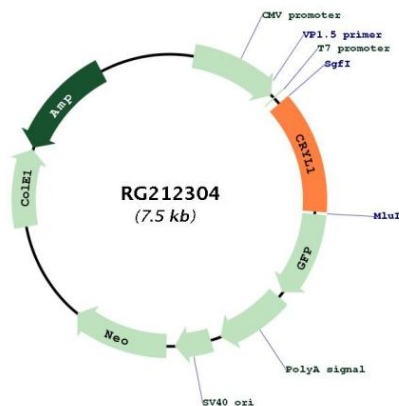
UniProt ID: [Q9Y2S2](#)

Cytogenetics: 13q12.11

Domains: 3HCDH, 3HCDH_N

Gene Summary: The uronate cycle functions as an alternative glucose metabolic pathway, accounting for about 5% of daily glucose catabolism. The product of this gene catalyzes the dehydrogenation of L-gulonate into dehydro-L-gulonate in the uronate cycle. The enzyme requires NAD(H) as a coenzyme, and is inhibited by inorganic phosphate. A similar gene in the rabbit is thought to serve a structural role in the lens of the eye. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG212304