

Product datasheet for **RG213389**

ACVRL1 (NM_001077401) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACVRL1 (NM_001077401) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ACVRL1
Synonyms:	ACVRLK1; ALK-1; ALK1; HHT; HHT2; ORW2; SKR3; TSR-I
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG213389 representing NM_001077401
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGACCTTGGGCTCCCCAGAAAGGCCTTCTGATGCTGCTGATGGCCTTGGTGACCCAGGGAGACCCTG
 TGAAGCCGTCTCGGGCCCGCTGGTACCTGCAGGTGTGAGAGCCACATTGCAAGGGCCCTACCTGCCG
 GGGGCCCTGGTGACAGTAGTGCTGGTGCAGGGAGGGGAGGCACCCCCAGGAACATCGGGGCTGCGGG
 AACTTGACAGGGAGCTCTGCAGGGGGCGCCCCACCGAGTTCGTCAACCACTACTGCTGCACAGCCACC
 TCTGCAACCACAACGTGTCCCTGGTGTGGAGGCCACCAACCTCCTTCGGAGCAGCCGGGAACAGATGG
 CCAGCTGGCCCTGATCCTGGGCCCGTGTGCCCTTGTGCCCTGGTGGCCCTGGGTGTCTGGGCCTG
 TGGCATGTCCGACGGAGGAGGAGAAGCAGCGTGGCCTGCACAGCGAGCTGGGAGAGTCCAGTCTCATCC
 TGAAGCATCTGAGCAGGGCGACAGCATGTTGGGGACCTCCTGGACAGTACTGCACCACAGGGAGTGG
 CTCAGGGCTCCCCTTCTGGTGCAGAGGACAGTGGCAGCGAGGTGCCCTGGTGGAGTGTGTGGAAAA
 GGCCGCTATGGCGAAGTGTGGCGGGCTTGTGGCACGGTGGAGTGTGGCCGTCAAGATCTTCTCCCTCGA
 GGGATGAACAGTCTGGTTCGGGAGACTGAGATCTATAACACAGTGTGCTCAGACACGACAACATCCT
 AGGCTTCATCGCCTCAGACATGACCTCCCGCAACTCGAGCACGCAGCTGTGGCTCATCACGCACTACCAC
 GAGCACGGCTCCCTCTACGACTTCTGCAGAGACAGCGCTGGAGCCCCATCTGGCTCTGAGGCTAGCTG
 TGTCCGCGCATGCGCCCTGGCGCACCTGCACGTGGAGATCTTCGGTACACAGGGCAAACAGCCATTGC
 CCACCGGACTTCAAGAGCCGCAATGTGCTGGTCAAGAGCAACCTGCAGTGTGCATCGCCGACCTGGGC
 CTGGCTGTGATGCACTCACAGGGCAGCGATTACCTGGACATCGGCAACAACCCGAGAGTGGGCACCAAGC
 GGTACATGGCACCCGAGGTGCTGGACGAGCAGATCCGCACGGACTGCTTTGAGTCTACAAGTGGACTGA
 CATCTGGGCCTTTGGCCTGGTGTGTGGGAGATTGCCCGCCGGACCATCGTGAATGGCATCGTGGAGGAC
 TATAGACCACCCTTCTATGATGTGGTGCCTAATGACCCAGCTTTGAGGACATGAAGAAGTGGTGTGTG
 TGGATCAGCAGACCCCCACCATCCCTAACCGGCTGGTGCAGACCCGGTCTCTCAGGCCTAGCTCAGAT
 GATGCGGGAGTGTGGTACCCAAACCCCTGCCCCGACTCACCGCGCTGCGGATCAAGAAGACACTACAA
 AAAATTAGCAACAGTCCAGAGAAGCCTAAAGTATTCAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG213389 representing NM_001077401
 Red=Cloning site Green=Tags(s)

MTLGSPRKGLMLLMALVTQDPVKPSRGPLVTCTCESPHCKGPTCRGAWCTVVLVREEGRHPQEHRCGG
 NLHRELCRGRPTEFVNHYCCDShLcNHNVSLVLEATQPPSEQPGTDGQLALILGPVLALLALVALGVLGL
 WHVRRRQEKQRGLHSELGESSLILKASEQGDsMLGDLLDSDCTTGSgSGLPFLVQRtVARQVALVECVGK
 GRYGEVWRGLWHGESVAVKIFSSRDEQSWFRETEIYNTVLLRHDNILGFIASDmTSRNSSTQLWLIthYH
 EHGSlyDFLQRQTLepHLALRLAVSAACGLAHLHVEIFGTQgKPAIAHRDFKSRNVLVKSNLQCCIADLG
 LAVMHSQGSdYLDIGNNPRVgTKRYMAPEVLDEQIRTDcFESYKWTDIWAFGLVLWEIARRTIVNGIVED
 YRPPFYDvVVPNDPSFEDMKkVVcVDQQTPTIPNRLAADPVLsGLAQmMREcWYPNP SARLTALRIKkTLQ
 KISNSPEKPKVIQ

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001077401

ORF Size: 1509 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_001077401.2](#)

RefSeq Size: 4126 bp

RefSeq ORF: 1512 bp

Locus ID: 94

UniProt ID: [P37023](#)

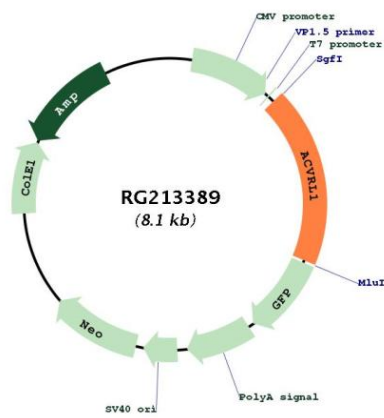
Cytogenetics: 12q13.13

Protein Families: Druggable Genome, Protein Kinase, Transmembrane

Protein Pathways: Cytokine-cytokine receptor interaction, TGF-beta signaling pathway

Gene Summary: This gene encodes a type I cell-surface receptor for the TGF-beta superfamily of ligands. It shares with other type I receptors a high degree of similarity in serine-threonine kinase subdomains, a glycine- and serine-rich region (called the GS domain) preceding the kinase domain, and a short C-terminal tail. The encoded protein, sometimes termed ALK1, shares similar domain structures with other closely related ALK or activin receptor-like kinase proteins that form a subfamily of receptor serine/threonine kinases. Mutations in this gene are associated with hemorrhagic telangiectasia type 2, also known as Rendu-Osler-Weber syndrome 2. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG213389