

## Product datasheet for **RG224178**

### Alkaline Phosphatase (ALPI) (NM\_001631) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Alkaline Phosphatase (ALPI) (NM_001631) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Alkaline Phosphatase
Synonyms:	IAP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG224178 representing NM\_001631  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGACGGGGCCCTGGGTGCTGCTGCTGCTGGCCCTGAGGCTACAGCTCTCCCTGGGCGTCATCCCAGCTG  
 AGGAGGAGAACC CGCCTTCTGGAACCGCCAGGCAGCTGAGGCCCTGGATGCTGCCAAGAAGCTGCAGCC  
 CATCCAGAAGGTCGCAAGAACCTCATCTCTTCTGGGCGATGGGTTGGGGGTGCCACGGTGACAGCC  
 ACCAGGATCTAAAGGGGCGAAGAATGGCAAACCTGGGCGCTGAGACGCCCTGGCCATGGACCGTTCC  
 CATACCTGGCTCTGTCCAAGACATAACAATGTGGACAGACAGGTGCCAGACAGCGCAGCCACAGCCACGGC  
 CTACCTGTGCGGGGTCAAGGCCAACTCCAGACCATCGGCTTGAGTGCAGCCGCCGCTTTAACAGTGC  
 AACACGACACGCGCAATGAGGTCATCTCCGTGATGAACCGGCCAAGCAAGCAGGAAAGTCAGTAGGAG  
 TGGTGACCACACAGGGTGCAGCACGCCTCGCCAGCCGGCACCTACGCACACACAGTGAACCGCAACTG  
 TACTCAGATGCTGACATGCCTGCCTCAGCCCGCAGGAGGGGTGCCAGGACATCGCCACTCAGCTCATC  
 TCCAACATGGACATTGAGTGATCCTTGGCGGAGGCCGCAAGTACATGTTTCCCATGGGGACCCAGACC  
 CTGAGTACCCAGCTGATGCCAGCCAGAATGGAATCAGGCTGGACGGGAAGAACCTGGTGCAGGAATGGCT  
 GGCAAAGCACCAGGGTGCCTGGTATGTGTGGAACCGCACTGAGCTCATGCAGGCGTCCCTGGACAGTCT  
 GTGACCCATCTCATGGCCTCTTTGAGCCCGGAGACACGAAATATGAGATCCACCAGACCCACACTGG  
 ACCCTCCTGATGGAGATGACAGAGGCTGCCCTGCGCCTGCTGAGCAGGAACCCCGCGGCTTCTACCT  
 CTTTGTGGAGGGCGCCGCATCGACCATGGTCATCATGAGGGTGTGGCTTACCAGGCACTCACTGAGGCG  
 GTCATGTTGACGACGCCATTGAGAGGGCGGCCAGCTCACCAGCAGGAGGACACGCTGACCCTCGTCA  
 CCGTGACCACTCCCATGCTTCTCCTTTGGTGGCTACACCTTGGCAGGGAGCTCCATCTTCGGGTTGGC  
 CCCAGCAAGGCTCAGGACAGCAAAGCCTACACGTCCATCCTGTACGGCAATGGCCCGGGCTACGTGTTT  
 AACTCAGGCGTGCAGCAGAGCTGAATGAGAGCGAGAGCGGGAGCCCGATTACCAGCAGCAGGCGGCGG  
 TGCCCTGTGTCGAGACCCACGGAGCGAAGACGTGGCGGTGTTTGCAGCGGCGCCGAGGCGCACCT  
 GGTGCATGGTGTGAGGAGCAGAGCTTCGTAGCGCATGTCATGGCCTTCGCTGCCTGTCTGGAGCCCTAC  
 ACGGCTGCGACCTGGCGCCTCCCGCTGCACCACCGACCGCGCACCCAGTTGCCGCGTCTGTCAC  
 TGCTGGCCGGGACCTGCTGCTGCTGGGGCGTCCGCTGCTCCC

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>RG224178 representing NM\_001631  
 Red=Cloning site Green=Tags(s)

MQGPWVLLLLGLRLQLSLGVIPAEENPAFWNRQAAEALDAKKLQPIQKVAKNLI LFLGDGLVPTVTA  
 TRILKGQKNGKLGPEPLAMDRFPYLALSKTYNVDRQVPDSAATAAYLCGVKANFQTIGLSAAARFNQC  
 NTTRGNEVISVMNRAKQAGKSVGVTTRVQHASPAGTYAHTVNRNWYSDAMPASARQEGCQDIATQLI  
 SNMIDIVILGGGRKYMFPMPGTPDPEYPADASQNGIRLDGKNLVQEWLAKHQGAWYVWNRTELMQASLDQS  
 VTHLMGLFEPGDTKYEIHRDPTLDPSLMEMTEAALRLLSRNPRGFYLFVEGGRIDHGHHEGVAYQALTEA  
 VMFDDAIERAGQLTSEEDTLTLVADHSHVFSFGGYTLRGSSIFGLAPSKAQDSKAYTSILYGNPGYVF  
 NSGVRPDVNESESGPDYQQAAVPLSSETHGGEDVAVFARGPQAHLVHGVQEVSFAHVMAFAACLEPY  
 TACDLAPPACTTDAHPVAASLPLLAGTLLLLGASAAP

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001631

**ORF Size:** 1584 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\\_001631.5](#)

**RefSeq Size:** 2516 bp

**RefSeq ORF:** 1587 bp

**Locus ID:** 248

**UniProt ID:** [P09923](#)

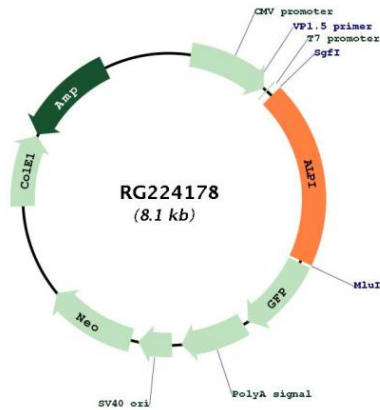
**Cytogenetics:** 2q37.1

**Protein Families:** Druggable Genome

**Protein Pathways:** Folate biosynthesis, Metabolic pathways

**Gene Summary:** There are at least four distinct but related alkaline phosphatases: intestinal, placental, placental-like, and liver/bone/kidney (tissue non-specific). The intestinal alkaline phosphatase gene encodes a digestive brush-border enzyme. This enzyme is a component of the gut mucosal defense system and is thought to function in the detoxification of lipopolysaccharide, and in the prevention of bacterial translocation in the gut. [provided by RefSeq, Dec 2014]

**Product images:**



Circular map for RG224178