

## Alkaline phosphatase, germ cell type (ALPG) Active Protein | ALPG active protein

Recombinant Human Alkaline phosphatase, germ cell type (ALPG)(Active)

CATALOG #  
**AAA279192**

HOST  
**Mammalian cell**

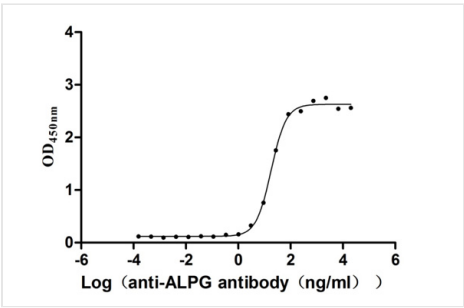
### PRODUCT SYNONYMS

Alkaline phosphatase; germ cell type (ALPG); Recombinant Human Alkaline phosphatase; germ cell type (ALPG)(Active); ALP-1; Alkaline phosphatase Nagao isozyme; placental-like; Germ cell alkaline phosphatase; Placental alkaline phosphatase-like; ALPG active protein

### PRODUCT SPECIFICATIONS

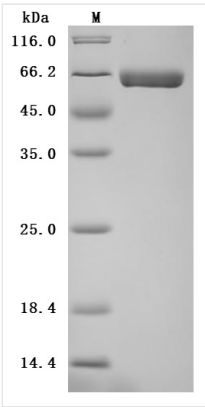
|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                    | Mammalian cell                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Purity/Purification     | Greater than 95% as determined by SDS-PAGE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Form/Format             | Lyophilized powder<br>Lyophilized from a 0.2 um filtered 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Sequence Positions      | 20-503aa; Full Length of Mature Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Sequence                | IIPVEEENPD FWNRQAAEAL GAAKKLQPAQ TAAKNLIIFL GDGMGVSTVT AARILKGQKK DKLGPEFLA<br>MDRFPYVALS KTYSVDKHVP DSGATATAYL CGVKGNFQTI GLSAAARFNQ CNTTRGNEVI SVMNRAKKAG<br>KSVGVTTR VQHASPAGAY AHTVNRNWYS DADVPASARQ EGCQDIATQL ISNMDIDVIL GGGRKYMFP<br>GTPDPEYPDD YSQGGTRLDG KNLVQEWLAK HQGARYVWNR TELLQASLDP SVTHLMGLFE PGDMKYEIHR<br>DSTLDPSLME MTEAALLLS RNPRGFFLV EGGRIDHGH ESRAYRALTE TIMFDDAIER AGQLTSEEDT<br>LSLVTADHS VFSFGGYPLR GSSIFGLAPG KARDRKAYTV LLYNGPGYV LKDGARPDVT ESESGSPEYR<br>QQSAVPLDGE THAGEDVAVF ARGPQAHVH GVQEQTIAH VMAFAACLEP YTACDLAPRA GTTD\$                                                                                                                                                                                                                                                                                       |
| Species                 | Homo sapiens (Human)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Tag                     | C-terminal 10xHis-tagged                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Endotoxin               | Less than 1.0 EU/ug as determined by LAL method.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Research Area           | Cancer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Biological Activity     | Measured by its binding ability in a functional ELISA. Immobilized Human ALPG at 2 ug/mL can bind Anti-ALPG recombinant antibody, the EC50 is 14.09-23.17 ng/mL.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Preparation and Storage | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20 degree C/-80 degree C. The shelf life of lyophilized form is 12 months at -20 degree C/-80 degree C.<br>Repeated freezing and thawing is not recommended. Store working aliquots at 4 degree C for up to one week. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20 degree C/-80 degree C. Our default final concentration of glycerol is 50%. Customers could use it as reference. |

IMAGES



Bioactivity

Measured by its binding ability in a functional ELISA. Immobilized Human ALPG at 2?g/mL can bind Anti-ALPG recombinant antibody, the EC50 is 14.09-23.17 ng/mL.



SDS-PAGE

Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

ADDITIONAL INFORMATION

|                                                     |                                                                                                                                                                                                         |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for ALPG active protein | May hydrolyze various phosphate compounds.                                                                                                                                                              |
| Product Categories/Family for ALPG active protein   | Active Protein & In Stock Protein                                                                                                                                                                       |
| References                                          | "Mutation of a single amino acid converts germ cell alkaline phosphatase to placental alkaline phosphatase."Watanabe T., Wada N., Kim E.E., Wyckoff H.W., Chou J.Y.J. Biol. Chem. 266:21174-21178(1991) |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                                                                                 |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 157266296                                                                                                                                                                                                       |
| NCBI GeneID                      | 251                                                                                                                                                                                                             |
| NCBI Accession #                 | NP_112603.2                                                                                                                                                                                                     |
| NCBI GenBank Nucleotide #        | NM_031313.2                                                                                                                                                                                                     |
| UniProt Accession #              | P10696; Q16727; Q53S81; Q96CM1; A8KAF2                                                                                                                                                                          |
| Molecular Weight                 | 57,377 Da                                                                                                                                                                                                       |
| NCBI Official Full Name          | alkaline phosphatase, placental-like preproprotein                                                                                                                                                              |
| NCBI Official Synonym Full Names | alkaline phosphatase, placental-like 2                                                                                                                                                                          |
| NCBI Official Symbol             | ALPPL2                                                                                                                                                                                                          |
| NCBI Official Synonym Symbols    | ALPG; GCAP; ALPPL                                                                                                                                                                                               |
| NCBI Protein Information         | alkaline phosphatase, placental-like; ALP-1; Nagao isozyme; germ cell alkaline phosphatase; alkaline phosphatase Nagao isozyme; placental-like alkaline phosphatase; testicular and thymus alkaline phosphatase |
| UniProt Protein Name             | Alkaline phosphatase, placental-like                                                                                                                                                                            |
| UniProt Gene Name                | ALPPL2                                                                                                                                                                                                          |
| UniProt Synonym Gene Names       | ALPPL; GCAP; PLAP-like                                                                                                                                                                                          |
| UniProt Entry Name               | PPBN_HUMAN                                                                                                                                                                                                      |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

