

Recombinant Human Alkaline phosphatase (Intestinal type)/ALPI Protein

Catalog No.: RP00679

Sequence Information

Species	Gene ID
Human	248
Swiss Prot	Tags
P09923	C-6His

Synonyms

ALPI, Intestinal-type alkaline phosphatase, IAP, Intestinal alkaline phosphatase, EC:3.1.3.1

Product Information

Source	Purification
HEK293 cells	≥ 90 % as determined by SDS-PAGE.

Calculated MW	Observed MW
53.15 kDa	60-75 kDa

Endotoxin

< 0.1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Background

Recombinant Human Alkaline phosphatase (Intestinal type)/ALPI Protein encodes for intestinal phosphatase alkaline, a brush border metalloenzyme that hydrolyses phosphate from the lipid A moiety of lipopolysaccharides and thereby drastically reduces Toll-like receptor 4 agonist activity. ALPI mutations impaired either stability or catalytic activity of ALPI and rendered it unable to detoxify lipopolysaccharide-dependent signalling. ALPI mutations should be included in screening for monogenic causes of inflammatory bowel diseases and lay the groundwork for ALPI-based treatments in intestinal inflammatory disorders.

Basic Information

Description

Recombinant Human Alkaline phosphatase (Intestinal type)/ALPI Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Val20-Thr502) of Human Alkaline phosphatase (Intestinal type)/ALPI (Accession #NP_001622.2) fused with His tag at the C-terminus.

Activity

Measured by its ability to cleave a fluorogenic substrate, 4-Methylumbelliferyl phosphate (4-MUP). The specific activity is >10412.60 pmol/min/μg.

Shipping

Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Storage

Store at -20°C

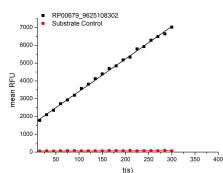
Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

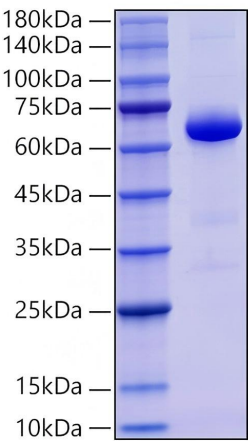
Contact

		400-999-6126
		cn.market@abclonal.com.cn
		www.abclonal.com.cn

Validation Data



Measured by its ability to cleave a fluorogenic substrate, 4-Methylumbelliferyl phosphate (4-MUP). The specific activity is >10412.60 pmol/min/μg.



Recombinant Human Alkaline phosphatase (Intestinal type)/ALPI Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.