

Recombinant Human Alkaline Phosphatase/ALPI Protein (His Tag)

Catalog Number: PKSH030690

Note: Centrifuge before opening to ensure complete recovery of vial contents.

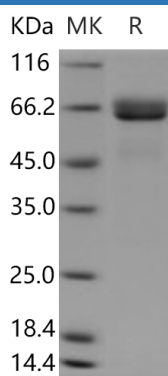
Description

Species	Human
Source	HEK293 Cells-derived Human Alkaline Phosphatase/ALPI protein Met 1-Asp 503, with an C-terminal His
Calculated MW	54.0 kDa
Observed MW	66 kDa
Accession	P09923
Bio-activity	Measured by its ability to cleave a fluorogenic substrate, 4-Methylumbelliferyl phosphate (4-MUP). The specific activity is > 1000 pmoles/min/μg.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

ALPI 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.

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