

Acid phosphatase 1, 1-158 aa

Human, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP0280

Full name: Acid phosphatase 1, soluble isoform b

NCBI Accession No.: NP_009030

Synonyms: ACP1, HAAP, LMW-PTP, Red cell acid phosphatase 1, Adipocyte acid phosphatase

Description: Acid phosphatase 1, soluble, also known as ACP1, belongs to the phosphotyrosine protein. It functions as an acid phosphatase and a protein tyrosine phosphatase (PTPase) present in all human tissues, including adipocytes. This enzyme hydrolyzes protein tyrosine phosphate to protein tyrosine and orthophosphate, and also orthophosphoric monoesters to alcohol and orthophosphate. Recombinant ACP1, fused to His-tag at N-terminus, was expressed in *E.coli* and purified by conventional chromatography techniques

Form: Liquid. In 20 mM MES 6.0, 0.1 mM PMSF, 2 mM EDTA, 10% glycerol

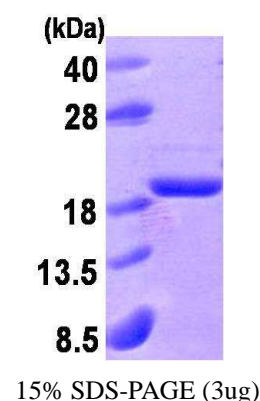
Molecular Weight: 20.1 kDa (178 aa), confirmed by MALDI-TOF

Purity: > 95% by SDS - PAGE

Concentration: 1 mg/ml (determined by Bradford assay)

Endotoxin Level: < 1.0 EU per 1µg of protein (determined by LAL method)

Biological activity: Specific activity is > 15,000 units/mg, and is defined as the amount of enzyme that hydrolyze 1.0 nmoles of p-nitrophenyl phosphate (pNPP) per minute at pH 7.5 at 37C.



Sequences of aminoacids:

MGSSHHHHHH SSSLVPRGSH MAEQATKSVL FVCLGNICRS PIAEAVFRKL VTDQNI SENW VIDSGAVSDW NVGRSPDPRA VSCLRNHG I H
TAHKARQ I TK EDFATFDY I L CMDES NLRDL NRKSNQVKTC KAK I ELLGSY DPQKQL I IED PYYGNDSDFE TVYQQCVRCC RAFLEKAH

General references:

De Lorenzo A., *et al.* (2009) *Metabolism*.**58**(3):351-4

Banci M., *et al.* (2009) *Cardiology*.**113**(4):236-242.

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C.
Avoid repeated freezing and thawing cycles.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.



Manufactured for:

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