

Acid Phosphatase 1 (ACP1) Active Protein | ACP1 active protein

Active Acid Phosphatase 1 (ACP1)

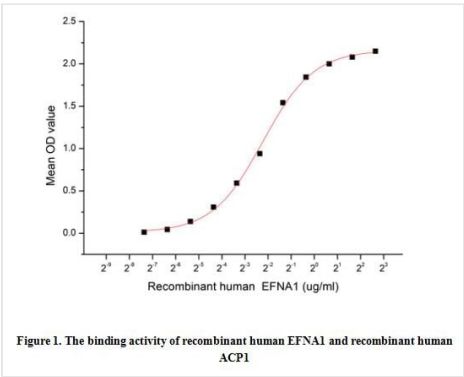
CATALOG # AAA161820	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Acid Phosphatase 1 (ACP1); Active Acid Phosphatase 1 (ACP1); Acid Phosphatase 1; HAAP; Low Molecular Weight Phosphotyrosine Protein Phosphatase; Adipocyte acid phosphatase; Red cell acid phosphatase 1; LMW-PTPase4; ACP1 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 90% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Met1~His15 8
Applicable Applications for ACP1 active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	6.7
Research Area	Enzyme & Kinase, Metabolic pathway, Hepatology, Bone metabolism
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

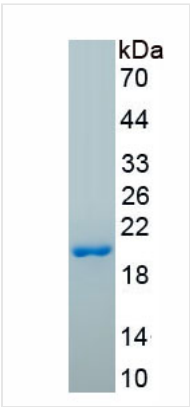


Bioactivity

Acid phosphatase locus 1 (ACP1) is a low molecular weight protein tyrosine phosphatase that has been shown to be an important regulator of insulin receptor signaling. EFNA1 is a kind of receptor tyrosine kinase which can interact with ACP1. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human EFNA1 and recombinant human ACP1. Briefly, EFNA1 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to ACP1-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-EFNA1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37 degree C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 uL stop solution to the wells and read at 450/630 nm immediately. When recombinant human ACP1 is immobilized at 2 ug/ml (100 ul/well), the concentration of EFNA1 that produces 50% optimal binding response is found to be approximately 0.21 ug/ml.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for ACP1 active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	1709543
NCBI GeneID	52
UniProt Accession #	P24666; P24667; Q16035; Q16036; Q16725; Q3KQX8; Q53RU0; A8K1L9; B5MCC7
Molecular Weight	158
NCBI Official Full Name	Low molecular weight phosphotyrosine protein phosphatase
NCBI Official Synonym Full Names	acid phosphatase 1, soluble
NCBI Official Symbol	ACP1
NCBI Official Synonym Symbols	HAAP
NCBI Protein Information	low molecular weight phosphotyrosine protein phosphatase; LMW-PTP; LMW-PTPase; adipocyte acid phosphatase; red cell acid phosphatase 1; protein tyrosine phosphatase; acid phosphatase of erythrocyte; cytoplasmic phosphotyrosyl protein phosphatase; low mole
UniProt Protein Name	Low molecular weight phosphotyrosine protein phosphatase
UniProt Gene Name	ACP1
UniProt Synonym Gene Names	LMW-PTP; LMW-PTPase
UniProt Entry Name	PPAC_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.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/acid-phosphatase-1-acp1/161820>