

32-6639: ACP5 Human

Application :	Functional Assay
Alternative Name :	Acid Phosphatase 5, Tartrate Resistant, Tartrate-Resistant Acid ATPase, Human Purple Acid Phosphatase, EC 3.1.3.2, TrATPase, Tartrate-Resistant Acid Phosphatase Type 5, Tartrate-Resistant Acid Phosphatase 5a, Tartrate-Resistant Acid Phosphatase 5b, Tartrate-Resistant Acid Phosphatase, Type 5 Acid Phosphatase, TRACP5a, TRACP5b, TR-AP, HPAP, TRAP, ACP5.

Description

Source: Sf9, Baculovirus cells.

Sterile Filtered colorless solution.

Tartrate-resistant acid phosphatase type 5 (ACP5) is involved in osteopontin and bone sialoprotein dephosphorylation. ACP5 is an iron containing glycoprotein which catalyzes the conversion of orthophosphoric monoester to alcohol and orthophosphate. ACP5 expression seems to increase in some pathological states such as Gaucher and Hodgkin diseases, the hairy cell, the B-cell, and the T-cell leukemias. ACP5 is the most basic of the acid phosphatases and is the only form not inhibited by L(+)-tartrate.

ACP5 Human Recombinant produced in Sf9 Baculovirus cells is a single, glycosylated polypeptide chain containing 304 amino acids (22-325 a.a.) and having a molecular mass of 34.3kDa (Migrates at 28-40kDa on SDS-PAGE under reducing conditions). ACP5 is purified by proprietary chromatographic techniques.

Product Info

Amount :	2 µg / 10 µg
Purification :	Greater than 90.0% as determined by SDS-PAGE.
Content :	ACP5 protein solution (0.5mg/ml) contains Phosphate Buffered Saline (pH 7.4) and 10% glycerol.
Storage condition :	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.
Amino Acid :	ATPALRFVAV GDWGGVPNAP FHTAREMANA KEIARTVQIL GADFILSLGD NFYFTGVQDI NDKRFQETFE DVFSDRSLRK VPWYVLAGNH DHLGNVSAQI AYSKISKRW NFPSPFYRLHF KIPQTNVSVA IFMLDTVTLC GNSDDFLSQQ PERPRDVKLA RTQLSWLKKQ LAAAREDYVL VAGHYPVWSI AEHGPTHCLV KQLRPLLATY GVTAYLCGHD HNLQYLQDEN GVGYYLSGAG NFMDPSKRHQ RKVPNGYLRH HYGTEDSLGG FAYVEISSKE MTVTYIEASG KSLFKTRLPR RARP.

Application Note

Specific activity is >10,000 units/mg, and is defined as the amount of enzyme that hydrolyze 1.0 nmoles of p-nitrophenyl phosphate (pNPP) per minute at pH 5.0 at 37±0.5°C.