

Alkaline Phosphatase Assay Kit (Fluorometric) ab83371

[35 References](#) [4 图像](#)

概述

产品名称	Alkaline Phosphatase Assay试剂盒(Fluorometric)
检测方法	Fluorescent
样品类型	Saliva, Urine, Serum, Plasma, Other biological fluids, Tissue Extracts, Cell Lysate, Cell culture media
检测类型	Enzyme activity (quantitative)
检测时间	1h 00m
种属反应性	与反应: Mammals, Other species
产品概述	<p>Alkaline Phosphatase Assay Kit (Fluorometric) (ab83371) is a highly sensitive kit to detect alkaline phosphatase (ALP) activity in serum and other biological samples. In the alkaline phosphatase assay protocol, ALP cleaves the phosphate group of the non-fluorescent 4-Methylumbelliferyl phosphate disodium salt (MUP) substrate, resulting in an increased fluorescent signal (Ex/Em = 360nm/440nm) when the substrate is dephosphorylated.</p> <p>The kit is an ultra sensitive, simple, direct and HTS-ready assay designed to measure ALP activity with a detection sensitivity ~1 μU, more sensitive than colorimetric assays.</p> <p>Alkaline phosphatase assay protocol summary:</p> <ul style="list-style-type: none"> - add samples and standards to wells - add reaction mix to wells - add ALP enzyme solution to standard wells (not to samples) - incubate for 30 min at room temp - add stop solution - analyze with microplate reader
说明	<p>This product is manufactured by BioVision, an Abcam company and was previously called K422 Alkaline Phosphatase Activity Fluorometric Assay Kit. K422-500 is the same size as the 500 test size of ab83371.</p> <p>Alkaline phosphatase (ALP) catalyzes the hydrolysis of phosphate esters in alkaline buffer and produces an organic radical and inorganic phosphate. The change in alkaline phosphatase level and activity is associated with many diseases in the liver and bones.</p>
平台	Microplate reader

性能

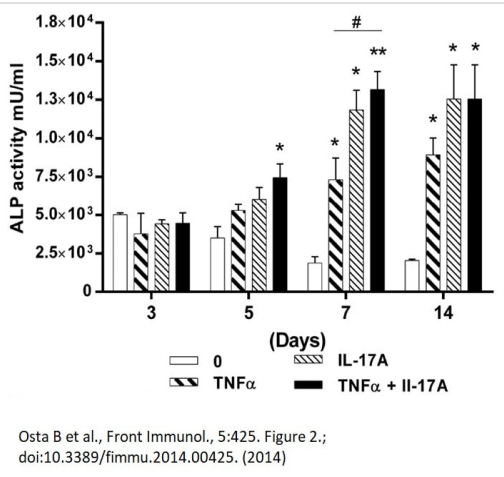
存放说明 Store at -20°C. Please refer to protocols.

组件	500 tests
ALP Assay Buffer I	1 x 100ml
Enzyme Mix II	1 vial
MUP Substrate	1 vial
Stop Solution VII	1 x 25ml

相关性 Alkaline phosphatase (ALP) catalyzes the hydrolysis of phosphate esters in alkaline buffer and produces an organic radical and inorganic phosphate. Changes in alkaline phosphatase level and activity are associated with various disease states in the liver and bone.

细胞定位 Cell membrane; Lipid-anchor, GPI-anchor.

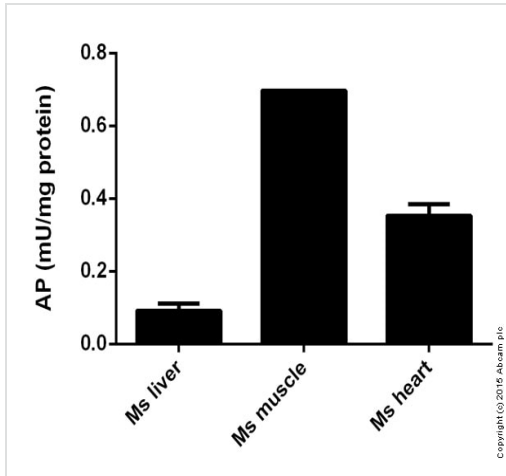
图片



Effects of IL-17A and/or TNF-α on alkaline phosphatase activity are shown. hMSCs were plated at a density of 5 x 10³ cell/cm², cells were cultured in osteogenic medium for 14 days, in the absence (0) or presence of TNF-α 1 ng/ml and/or IL-17A 50 ng/ml. ALP activity was measured by fluorometry using ab83371. Results were analyzed using the Wilcoxon test. *p < 0.05; **p < 0.005 vs. induction medium alone.

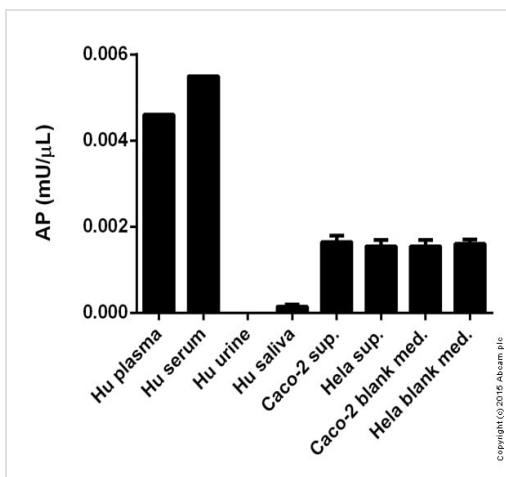
Functional Studies - Alkaline Phosphatase Assay
Kit (Fluorometric) (ab83371)

Osta B et al., Front Immunol., 5:425. Figure 2.; doi:10.3389/fimmu.2014.00425. (2014)



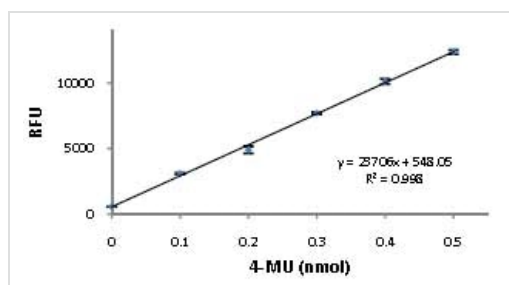
Alkaline phosphatase measured in mouse tissue lysates showing activity (mU) per mg protein of tested sample

Functional Studies - Alkaline phosphatase(ab83371)



Alkaline phosphatase measured in biological fluids showing quantity (mU) per microliter of tested sample

Functional Studies - Alkaline phosphatase
(ab83371)



4-Methylumbelliferone (4-MU) standard curve.

Functional Studies - Alkaline phosphatase
Fluorometric Assay Kit (ab83371)

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