abcam

Product datasheet

Alkaline Phosphatase Assay Kit (Fluorometric) ab83371

35 References 画像数 4

製品の概要

製品名 Alkaline Phosphatase Assay Kit (Fluorometric)

検出方法 Fluorescent

サンプルの種類 Saliva, Urine, Serum, Plasma, Other biological fluids, Tissue Extracts, Cell Lysate, Cell culture

media

アッセイタイプ Enzyme activity (quantitative)

全工程の試験時間 1h 00m

種交差性 交差種: Mammals, Other species

製品の概要 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.

The kit is an ultra sensitive, simple, direct and HTS-ready assay designed to measure ALP activity with a detection sensitivity $\sim 1 \, \mu U$, more sensitive than colorimetric assays.

Alkaline phosphatase assay protocol summary:

- 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

特記事項 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.

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.

試験プラットフォーム Microplate reader

制品の特性

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保存方法

Store at -20°C. Please refer to protocols.

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

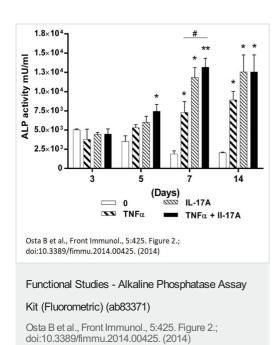
関連性

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.

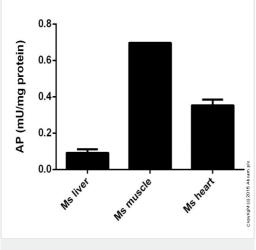
細胞内局在

Cell membrane; Lipid-anchor, GPI-anchor.

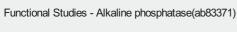
画像

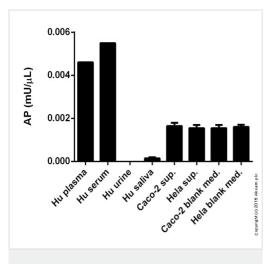


Effects of IL-17A and/or TNF- α on alkaline phosphatase activity are shown. hMSCs were plated at a density of 5 x 10³ cell/cm², cells were cultured in osteogenic medium for 14 days, in the absence (0) or presence of TNF- α 1 ng/ml and/or IL-17A 50 ng/ml. ALP activity was measured by fluorometry useing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



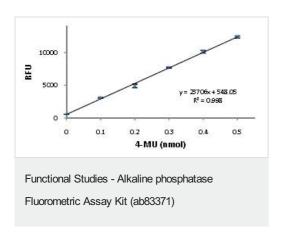
Alkaline phosphatase measured in mouse tissue lysates showing activity (mU) per mg protein of tested sample





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.

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