

## Product datasheet

# Alkaline Phosphatase Assay Kit (Fluorometric - Near Infrared) ab138887

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### Overview

<b>Product name</b>	Alkaline Phosphatase Assay Kit (Fluorometric - Near Infrared)
<b>Detection method</b>	Fluorescent
<b>Sample type</b>	Cell culture supernatant, Cell culture extracts
<b>Assay type</b>	Enzyme activity (quantitative)
<b>Sensitivity</b>	= 0.3 mU/ml
<b>Species reactivity</b>	<b>Reacts with:</b> Mammals, Other species
<b>Product overview</b>	<p>Alkaline Phosphatase Assay kit (Fluorometric-Near Infrared) (ab138887) uses our SunRed Dye based substrate. The weakly fluorescent SunRed Dye phosphate is sensitive to phosphatase-induced hydrolysis, giving the SunRed Dye fluorophore that possesses intense red fluorescence. Upon phosphatase-induced hydrolysis, the SunRed Dye phosphate solution has its absorption blue-shifted more than 100 nm. The maximum absorption of SunRed Dye fluorophore at 633 nm makes this substrate an ideal NIR probe that can be readily detected with many fluorescence instrument systems often equipped with Cy5 settings. Based on the near infrared fluorescence of SunRed Dye fluorophore, the signal can be easily read by a fluorescence microplate reader at Ex/Em = ~630/660 nm.</p> <p>ab138887 is designed to accommodate high throughput screening of protein phosphatase inhibitors due to its low interference from biological samples. It can be performed in a convenient 96-well or 384-well microtiter-plate format and easily adapted to automation without a separation step.</p>
<b>Notes</b>	Alkaline phosphatase is widely used in various biological assays (in particular, immunoassays) and ELISA-based diagnostics.
<b>Platform</b>	Microplate reader

### Properties

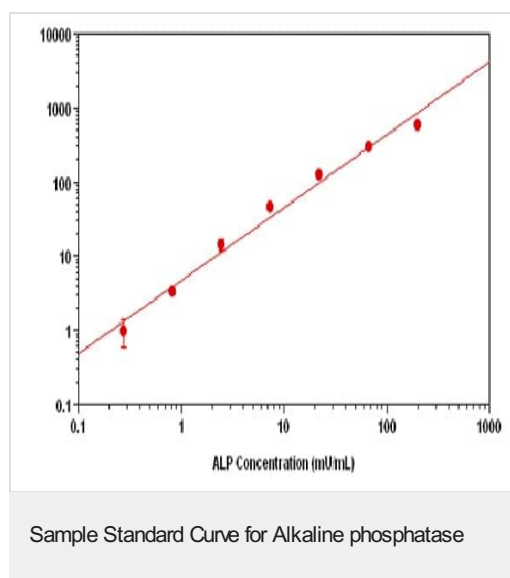
<b>Storage instructions</b>	Store at -20°C. Please refer to protocols.
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Components	500 tests
Alkaline Phosphatase Standard	1 x 10 units
Assay Buffer	1 x 25ml
SunRed Dye Substrate (light sensitive)	1 vial

**Relevance** 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.

**Cellular localization** Cell membrane; Lipid-anchor, GPI-anchor.

## Images



Alkaline phosphatase dose response was measured with the Alkaline Phosphatase Assay Kit (Fluorometric –Near Infrared) in a solid black 96-well plate using a Gemini microplate reader (Molecular Devices). As low as 0.3 mU/mL alkaline phosphatase can be detected with 60 minutes incubation (n=3).

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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