

Chemiluminescence substrate-AMPPD (TBP0229)

Catalog	Unit Size
TBP0229-100 mg	100 mg
TBP0229-500 mg	500 mg
TBP0229-1g	1 g

Description

AMPPD is a chemiluminescent substrate for alkaline phosphatase (AP) reactions. Upon enzymatic hydrolysis, AMPPD is converted into AMP-D, producing a strong light signal. The intensity and duration of the emitted light are proportional to the concentration of alkaline phosphatase. When AP is linked to a hybridized probe, the signal allows quantitative detection of the hybrid molecules.

3-(2'-spiroadamantyl)-4-methoxy-4-(3-phosphoryloxy)-phenyl-1,2-dioxetane.

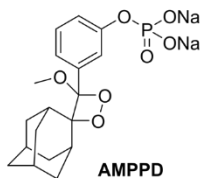
Specifications

Abbreviation: AMPPD

CAS No.: 124951-96-8

Appearance: White powder

Chemical structure:



Chemical formula: C₁₈H₂₁Na₂O₇P

Molecular weight: 426.31

Purity: ≥98 % (HPLC)

Storage: Store at 2–8 °C in a sealed, dry container, protected from light. Stable for up to two years.

Features

- Exceptional sensitivity – capable of detecting ALP at levels below 10⁻¹⁹ mol/mL.
- Stable signal – luminescence remains steady for up to 60 minutes.
- Good linearity – within the range of 50–50,000 pg/mL, alkaline phosphatase concentration shows a strong linear correlation with emitted photons.
- High stability – can be stored for over two years at 2–8 °C, protected from light, making it suitable for large-scale chemiluminescence applications.

For research use only.