

APS-5 Chemiluminescence Substrate Solution (TBP0216)

Catalog	Unit Size
TBP0216-100 ml	100 ml
TBP0216-1000 ml	1000 ml

Description

APS-5 is a high-performance chemiluminescent substrate specifically designed for alkaline phosphatase (ALP) detection. It is optimized for high-sensitivity and rapid chemiluminescence immunoassays and is particularly well suited for compact chemiluminescence systems and POCT applications.

Key Features

- Ultra-low background luminescence: Effectively reduces nonspecific background signals, improving assay accuracy.
- Rapid response: Peak signal develops within 10 seconds, significantly shortening assay time and increasing throughput.
- Excellent sensitivity: Enables detection of ALP at levels below 10^{-19} mol/mL, meeting the requirements of ultra-sensitive assays.
- Temperature-insensitive performance: Analytical results remain stable across 25°C–35°C, minimizing the need for precise temperature control.
- Wide linear range: Demonstrates excellent linearity between 50–50,000 pg/mL, with a strong correlation between ALP concentration and photon output.
- High system compatibility: Ideal for small-scale chemiluminescence analyzers, including POCT chemiluminescence platforms.

Advantages

APS-5 offers lower background, maximized signal-to-noise ratio (SNR), and high reagent sensitivity. Compared with competing substrates, Tribioscience' APS-5 delivers approximately 20% higher SNR, enabling stronger signal output and more reliable detection performance.

Technical principles

With alkaline phosphatase (ALP) catalysis, Chemiluminescence substrate – APS-5 will release protons. At a specific concentration of ALP, the number of released protons is proportional to the concentration of ALP.

Specifications

Appearance:	Light yellow powder
Storage:	-25 ~ -15 °C and protected from the light.

For research use only.