

Luminol [3-Aminophthalhydrazide] *CAS 521-31-3*

Catalog number: 11050

Unit size: 1 g

Product Details

Storage Conditions Freeze (<-15 °C), Minimize light exposure

Expiration Date 12 months upon receiving

Chemical Properties

Appearance White solid

Molecular Weight 177.16

Soluble In DMSO

Chemical Structure

Spectral Properties

Excitation Wavelength 355 nm

Emission Wavelength 412 nm

Applications

Luminol [3-Aminophthalhydrazide] is a luminescent peroxidase substrate. To exhibit its luminescence, luminol must be activated with an oxidant. HRP catalyzes the decomposition of hydrogen peroxide. When luminol reacts with the hydroxide ion, a dianion is formed. The oxygen produced from the hydrogen peroxide then reacts with the luminol dianion. The product of this reaction, an organic peroxide, is very unstable and is made by the loss of a nitrogen, the change of electrons from excited state to ground state, and the emission of energy as a photon. This emission produces the blue glow.