

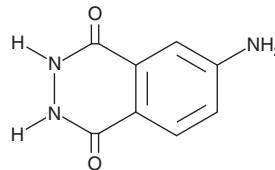
PRODUCT INFORMATION



Isoluminol

Item No. 45126

CAS Registry No.: 3682-14-2
Formal Name: 7-amino-4-hydroxy-1(2H)-phthalazinone
Synonym: NSC 13567
MF: $C_8H_7N_3O_2$
FW: 177.2
Purity: $\geq 98\%$
Em. Max: 416 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Isoluminol is supplied as a solid. A stock solution may be made by dissolving the isoluminol in the solvent of choice, which should be purged with an inert gas. Isoluminol is slightly soluble (0.1-1 mg/ml) in acetonitrile:water (1:1).

Description

Isoluminol is a chemiluminescent probe and an isomer of luminol (Item No. 16803).^{1,4} It displays a chemiluminescent emission maximum of 416 nm.¹ Isoluminol exhibits enhanced chemiluminescence when conjugated to proteins and antibodies and has been used in competitive protein binding assays and immunoassays.^{1,3,4} It has also been used to measure the production of extracellular reactive oxygen species (ROS).²

References

1. Brundrett, R.B. and White, E.H. Synthesis and chemiluminescence of derivatives of luminol and isoluminol. *J. Am. Chem. Soc.* **96**(24), 7497-7502 (1976).
2. Lundqvist, H. and Dahlgren, C. Isoluminol-enhanced chemiluminescence: A sensitive method to study the release of superoxide anion from human neutrophils. *Free Rad. Biol. Med.* **20**(6), 785-792 (1996).
3. Schroeder, H.R., Vogelhut, P.O., Carrico, R.J., *et al.* Competitive protein binding assay for biotin monitored by chemiluminescence. *Anal. Chem.* **48**(13), 1933-1937 (1976).
4. Schroder, H.R. and Yeager, F.M. Chemiluminescence yields and detection limits of some isoluminol derivatives in various oxidation systems. *Anal. Chem.* **50**(8), 1114-1120 (1978).
5. Messeri, G., Orlandini, A., and Pazzagli, M. Luminescent immunoassay using isoluminol derivatives. *J. Biolumin. Chemilumin.* **4**(1), 154-158 (1989).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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