

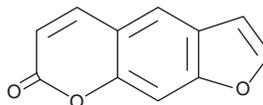
PRODUCT INFORMATION



Psoralen

Item No. 11751

CAS Registry No.: 66-97-7
Formal Name: 7H-furo[3,2-g][1]benzopyran-7-one
Synonyms: Ficusin, Furocoumarin, NSC 404562
MF: C₁₁H₆O₃
FW: 186.2
Purity: ≥98%
UV/Vis.: λ_{max}: 246, 290, 331 nm
Supplied as: A crystalline 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

Psoralen is supplied as a crystalline solid. A stock solution may be made by dissolving the psoralen in the solvent of choice. Psoralen is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of psoralen in ethanol is approximately 1 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Psoralen is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, psoralen should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Psoralen has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Psoralen is a photoactive probe that has been used to investigate nucleic acid structure and function.¹ It intercalates into DNA and, when activated by ultraviolet radiation, can create covalent interstrand crosslinks, inducing apoptosis.² Because of its high UV absorbance, psoralen has been combined with UVA light (PUVA therapy) for the treatment of skin problems such as psoriasis.³

References

1. Litovchick, A., Clark, M.A., and Keefe, A.D. Universal strategies for the DNA-encoding of libraries of small molecules using the chemical ligation of oligonucleotide tags. *Artif. DNA PNA XNA* **5(1)**, (2014).
2. Vasquez, K.M. Targeting and processing of site-specific DNA interstrand crosslinks. *Environ. Mol. Mutagen* **51(6)**, 527-539 (2010).
3. Ahmed Asim, S., Ahmed, S., and Us-Sehar, N. Psoralen-ultraviolet A treatment with Psoralen-ultraviolet B therapy in the treatment of psoriasis. *Pak. J. Med. Sci.* **29(3)**, 758-761 (2013).

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.

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