

Pyronin G (Pyronin Y)

CAS Number: 92-32-0

Storage Temperature: Room Temperature

Product Description :

Appearance: Green to Black Powder

Molecular Formula: C₁₇H₁₉ClNO

Molecular Weight: 302.8

Synonyms: Pyronine Y, Pyronin J, and Pyronin G, and cationic xanthene dye

Pyronin Y solutions are red in transmitted light, displaying a yellow fluorescence in reflected light. Pyronin Y is used widely in combination with methyl green to selectively and differentially stain nucleic acids. In the dichromatic dye solution, Pyronin Y stains RNA red, while methyl green stains the DNA green.

Transfer RNA (tRNA) will complex with Pyronin Y at a 1:10 molar ratio when analyzed by polyacrylamide gel electrophoresis. tRNA (4 to 8 µg) complexed with Pyronin Y is visible as a red band during electrophoresis. The stained tRNA is also detectable by UV fluorescence at 302 nm. Pyronin Y can also be used in correlating RNA content by flow cytometry. In addition, Pyronin Y solutions may be utilized in staining liver cells that have been fixed in Carnoy's fluid.

Preparation Instructions:

Solubility is not tested, but the literature reports solubility up to 9% (i.e., 90 mg/mL) in water and 0.6% (6 mg/mL) in ethanol.

Storage/Stability :

Store the product at room temperature. It should be reevaluated every two years for suitability in user application.

Precautions and Disclaimer :

For Laboratory Use Only. Not for drug, household or other uses.