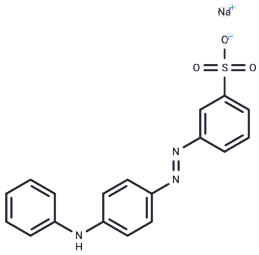
Data Sheet (Cat.No.T22229)

TargetMol

Acid Yellow 36

Chemical Properties



CAS No. : 587-98-4

Formula: C18H14N3NaO3S

Molecular Weight: 375.38

Storage: Keep away from direct sunlight
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Acid Yellow 36 (Metanil Yellow) is an azo dye and pH indicator, changing color from red at pH 1.2 to yellow at pH 2.3.
Targets(IC50)	Others,Cytochromes P450
Cell Research	Instructions I. Solution preparation 1. Stock solution: Dissolve Acid Yellow 36 in an appropriate solvent, usually water or alcohol solvent, to prepare a stock solution with a concentration of 1-10 mM. 2. Working solution: Depending on the experimental requirements, the stock solution can be diluted to an appropriate concentration, usually 10-100 μM. Buffer (such as PBS, pH 7.4) or other solutions required for the experiment can be used for dilution. II. Operation steps 1. pH indicator use: Acid Yellow 36 can be used to determine changes in pH, especially in the acidic range (pH 1.2-2.3), where the color changes from red to yellow. Adding Acid Yellow 36 directly to the dye solution can be used to monitor pH changes. 2. P-450 enzyme and cytosolic enzyme induction experiment: Acid Yellow 36 is used as an inducer of P-450 specific isozymes and cytosolic enzymes. In cell culture, the addition of Acid Yellow 36 can stimulate the activity of the corresponding enzymes and is suitable for studying the functions of these enzymes. 3. Cell experiments: Acid Yellow 36 is added to the cell culture medium, and the concentration range is usually 10-50 μM. 4. Enzyme activity detection: Use enzymatic methods (such as enzyme-linked immunosorbent assay ELISA or chromatography) to detect the activity of P-450 enzymes or cytosolic enzymes. 5. Calibration and control 1) Control group: Set up an experimental group without the addition of Acid Yellow 36 to ensure the specificity of enzyme induction. 2) Standard curve: A standard curve between dye concentration and color change can be established by using Acid Yellow 36 solutions with known concentrations. Notes 1) Photosensitivity: Like many azo dyes, Acid Yellow 36 is sensitive to light and should be avoided from prolonged exposure to strong light. 2) Storage conditions: Acid Yellow 36 should be stored in a dry, cool place, away from

Cell Research	heat and light, usually stored at -20°C. 3) Solubility: Acid Yellow 36 has good solubility in water, but it should be ensured that there are no undissolved solid particles. The above information is based on published literature. Experimental procedures should be appropriately modified to meet specific research demands.

Solubility Information

Solubility	DMSO: 50 mg/mL (133.2 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.664 mL	13.3198 mL	26.6397 mL
5 mM	0.5328 mL	2.664 mL	5.3279 mL
10 mM	0.2664 mL	1.332 mL	2.664 mL
50 mM	0.0533 mL	0.2664 mL	0.5328 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Eleryan A,et al. Adsorption of Acid Yellow 36 and direct blue 86 dyes to Delonix regia biochar-sulphur. Sci Rep. 2025 Jan 27;15(1):3448.

Farshchi ME, Aghdasinia H, Khataee A. Heterogeneous Fenton reaction for elimination of Acid Yellow 36 in both fluidized-bed and stirred-tank reactors: Computational fluid dynamics versus experiments. Water Res. 2019 Mar 15;151:203-214.

Lin S, et al. [Simultaneous determination of five yellow dyes in foods by high performance liquid chromatography coupled with tandem mass spectrometry]. Se Pu. 2011 Jan;29(1):79-82. Chinese.