Carmoisine

Cat. No.: HY-128448

CAS No.: 3567-69-9

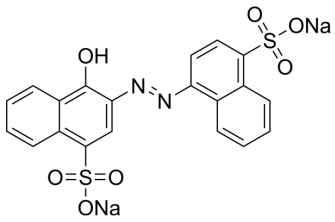
Molecular Formula: $C_{20}H_{12}N_2Na_2O_7S_2$

Molecular Weight: 502.43

Target: Fluorescent Dye

Pathway: Others

Storage: 4°C, sealed storage, away from moisture and light
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (99.52 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	1.9903 mL	9.9516 mL	19.9033 mL
	5 mM	0.3981 mL	1.9903 mL	3.9807 mL
	10 mM	0.1990 mL	0.9952 mL	1.9903 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Carmoisine (Azorubine) is an azo dye that can be used as a food additive[1][2].

In Vitro

Carmoisine augments the in vitro synthesis of leukotriene B4 (LTB4) and F2-isoprostanes from blood neutrophils. Carmoisine increases the formation of F2-isoprostanes from blood neutrophils at all tested concentrations[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Carmoisine (49.3-493 mg/kg; oral administration; for 42 days; male Wistar rats) treatment increases MAPK8 expression at remarkably low and high concentrations, the expression of NFκB and GADD45α does not change[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male Wistar rats (120-300 g)[1]
Dosage:	49.3 mg/kg, 493 mg/kg
Administration:	Oral administration; for 42 days

Result:	Resulted in apoptosis according to MAPK8 expression.

REFERENCES

[1]. B Raposa, et al. Food additives: Sodium benzoate, potassium sorbate, azorubine, and tartrazine modify the expression of NFκB, GADD45α, and MAPK8 genes. Physiol Int. 2016 Sep;103(3):334-343.

[2]. Latasha Leo, et al. Occurrence of azo food dyes and their effects on cellular inflammatory responses. Nutrition. 2018 Feb;46:36-40.

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