

Product Data Sheet

Product Name: Lumogallion

Cat. No.: GC49604

Chemical Properties

Cas. No. 4386-25-8

SMILES O=S(O)(C1=CC(Cl)=CC(/N=N/C2=C(O)C=C(O)C=C2)=C1O)=O

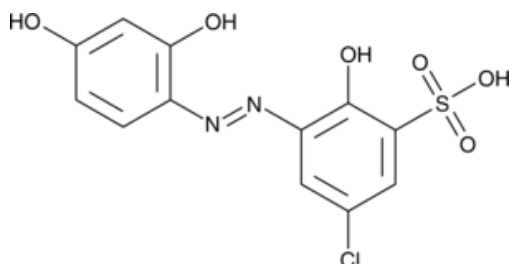
Formula $C_{12}H_9ClN_2O_6S$ M.Wt 344.7

Solubility DMF: 10 mg/ml, DMSO: 10 mg/ml, Ethanol: 1 mg/ml, PBS (pH 7.2): insol Storage -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

Lumogallion is a fluorescent probe for aluminum.¹ It binds to aluminum, forming a complex that displays excitation/emission maxima of 500/590 nm, respectively. Lumogallin has been used to detect aluminum in natural waters and human urine and serum samples by HPLC, as well as in fixed soybean roots and THP-1 cells by confocal microscopy.^{2,3,4,1}

1. Mold, M., Eriksson, H., Siesjö, P., et al. Unequivocal identification of intracellular aluminium adjuvant in a monocytic THP-1 cell line Sci. Rep. 46287(2014) 2. Sutheimer, S.H., and Cabaniss, S.E. Determination of trace aluminum in natural waters by flow-injection analysis with fluorescent detection of the lumogallion complex Analytica Chimica Acta 303211-221(1995) 3. Harper, M.,

Caution: Product has not been fully validated for medical applications. For research use only.

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Glowacki, C.R., and Michael, P.R. Industrial hygiene Anal. Chem. 69(12)307R-327R(1997) 4. Silva, I.R., Smyth, T.J., Moxley, D.F., et al. Aluminum accumulation at nuclei of cells in the root tip. Fluorescence detection using lumogallion and confocal laser scanning microscopy Plant Physiol. 123(2)543-552(2000)

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