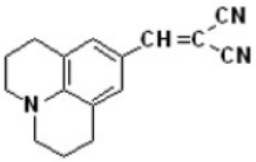
FT-65921A

DCVJ

Probe for environmental viscosity

Product Description

Name :	**DCVJ** 9-(2,2-Dicyanovinyl)julolidine 9-Julolidinylmethylenemalononitrile
Catalog Number :	FP-659219, 5 mg FP-65921A, 25 mg
Molecular Formula:	$C_{16}H_{15}N_3$ CAS 58293-56-4
MW :	249.32
λ_{max} Exc. / Em.	455/500 nm
Extinction Coefficient:	36,000 ± 3,000 cm-1 M-1
Solubility:	DMF, DMSO, 10-20%Methanol/Chloroform and basic buffer
Storage :	+4°C. Protect from light and moisture



Directions for use

DCVJ is a molecular rotor, a type fluorescent dye that responds to changes in environmental viscosity with a viscosity-dependent fluorescence quantum yield. The fluorescence intensity may increase by a factor of up to 30 when solvent viscosity is increased. DCVJ also binds to specific sites on tubulin dimers and has been used to investigate tubulin polymerization in living cells by fluorescence. DCVJ has two fluorescence excitation maxima, one near 405 nm and second variable maxima between 450 nm and 490 nm, and a variable, single fluorescence emission maxima between 490 and 505 nm.

Protocol may be found in the litterature.

Bibliographic References

- **Goligorsky MS** *et al*. Relationships between caveolae and eNOS: everything in proximity and the proximity of everything, *Am J Physiol Renal Physiol* 283, F1-10 (2002)
- **Haidekker M.** *et al*. Fluid shear stress increases membrane fluidity in endothelial cells: a study with DCVJ fluorescence, *Am. J. of Physiology* 278(4):H1017-Ha1 (2000)
- **Minei P.** *et al*., Molecular Rotors with Aggregation-Induced Emission (AIE) as Fluorescent Probes for the Control of Polyurethane Synthesis, *Chemosensors*, 9(1):3 (2021)

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- **Mochizuki S**, *et al*. Role of hyaluronic acid glycosaminoglycans in shear-induced endothelium-derived nitric oxide release, *Am J Physiol Heart Circ Physiol* 285, H722-6 (2003)
- **Mukherjee T.** *et al*., Live-cell imaging of the nucleolus and mapping mitochondrial viscosity with a dual function fluorescent probe, *Org. Biomol. Chem*., 19:3389-3395 (2021)
- **Palestini P**, *et al*. Composition, biophysical properties, and morphometry of plasma membranes in pulmonary interstitial edema , *Am J Physiol Lung Cell Mol Physiol* 282, L1382-90 (2002)

Related items

- Potassium Cyanine, BE6080
- RIPA lysis and Extraction Buffer, HG4361
- FQ Derivatization Reagent, FP-865249

Ordering information

Catalog size quantities and prices may be found at http://www.interchim.com.
Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask : FluoProbes® / Interchim; Hotline : +33(0)4 70 03 73 06

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