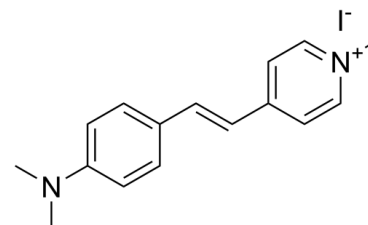


Data Sheet

Product Name:	4-Di-1-ASP
Cat. No.:	CS-0181320
CAS No.:	959-81-9
Molecular Formula:	C ₁₆ H ₁₉ N ₂
Molecular Weight:	366.24
Target:	Fluorescent Dye
Pathway:	Others
Solubility:	10 mM in DMSO



BIOLOGICAL ACTIVITY:

4-Di-1-ASP is a styryl dye used to stain glioma cells in living brain tissue for analysis of cell structure, viability, proliferation and endocytosis, cytokinesis and phagocytosis, as well as for observation of mitochondrial structures in living cells. 4-Di-1-ASP fluoresces green when imaged microscopically ($\lambda_{\text{ex}}/\lambda_{\text{em}} = 475/606 \text{ nm}$) [1][2]. *In Vitro*: Guidelines (Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs)[1].

1. Dissolve the dye in water and configure a mother liquor at a concentration of 2 mM.
2. Place the prepared cell sections in an incubator at 35°C, add the prepared dye solution to a final concentration of 1 μM and incubate with the stain for 10 min.
3. The prepared stained cell sections are placed on a microscope slide, cover with a coverslip and observe using a fluorescent confocal microscope with a maximum excitation wavelength of 475 nm and a maximum emission wavelength of 606 nm.

References:

- [1]. Lilia Y Kucheryavykh, et al. Visualization of implanted GL261 glioma cells in living mouse brain slices using fluorescent 4-(4-(dimethylamino)-styryl)-N-methylpyridinium iodide (ASP+). *Biotechniques*. 2012 Nov;53(5):305-9.
- [2]. Jensen J H Wong, et al. Simultaneous High-Throughput Conformational and Colloidal Stability Screening Using a Fluorescent Molecular Rotor Dye, 4-(4-(Dimethylamino)styryl)-N-Methylpyridinium Iodide (DASPMI). *J Biomol Screen*. 2016 Sep;21(8):842-50.

CAIndexNames:

Pyridinium, 4-[2-[4-(dimethylamino)phenyl]ethenyl]-1-methyl-, iodide (1:1)

SMILES:

C[N+]1=CC=C(/C=C/C2=CC=C(N(C)C)C=C2)C=C1.[I-]

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

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