

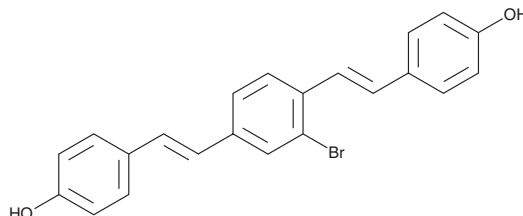
PRODUCT INFORMATION



K114

Item No. 34218

CAS Registry No.: 872201-12-2
Formal Name: 4,4'-[(2-bromo-1,4-phenylene) di-(1E)-2,1-ethenediyl]bis-phenol
MF: C₂₂H₁₇BrO₂
FW: 393.3
Purity: ≥98%
Ex./Em. Max 370/450 nm at pH 8.5;
420/520 nm at pH 10.5
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

K114 is supplied as a solid. A stock solution may be made by dissolving the K114 in the solvent of choice, which should be purged with an inert gas. K114 is soluble (≥10 mg/ml) in ethanol and DMSO.

Description

K114 is a fluorescent probe for the detection of amyloids.¹ It displays pH-dependent excitation/emission maxima at 370/450 and 395/520 nm at pH 8.5 and 10.5, respectively, and demonstrates an increase in fluorescence intensity in the presence of amyloid-β (1-40) (Aβ40) fibrils. K114 also displays fiber-dependent excitation/emission maxima for silk moth (*B. mori*) silk, Chilean rose tarantula (*G. rosea*) web, and 5XFAD mouse brain amyloid fibers.² It has been used to detect amyloid plaques in postmortem hippocampus from patients with Alzheimer's disease.

References

1. LeVine, H., III Mechanism of Aβ(1-40) fibril-induced fluorescence of (*trans,trans*)-1-bromo-2,5-bis(4-hydroxystyryl)benzene (K114). *Biochemistry* **44**(48), 15937-15943
2. Stepanchuk, A.A., Heyne, B., and Stys, P.K. Complex photophysical properties of K114 make for a versatile fluorescent probe for amyloid detection. *ACS Chem. Neurosci.* **12**(7), 1273-1280 (2021).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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