PRODUCT INFORMATION



C2-8

Item No. 21177

CAS Registry No.:	300670-16-0	
Formal Name:	N-(4-bromophenyl)-3-[[(4-bromophenyl) amino]sulfonyl]-benzamide	Br
Synonym:	Polyglutamine Aggregation Inhibitor III	
MF:	$C_{19}H_{14}Br_{2}N_{2}O_{3}S$	
FW:	510.2	
Purity:	≥98%	
UV/Vis.:	λ _{max} : 230, 274 nm	
Supplied as:	A crystalline solid	Ļ į
Storage:	-20°C	
Stability:	≥4 years	
Information represents	s the product specifications. Batch specific analytic	al results are provided on each certificate of analysis.

Laboratory Procedures

C2-8 is supplied as a crystalline solid. A stock solution may be made by dissolving the C2-8 in the solvent of choice. C2-8 is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of C2-8 in these solvents is approximately 33 mg/ml.

C2-8 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, C2-8 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. C2-8 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

C2-8 is an inhibitor of polyglutamine (polyQ) aggregation (IC₅₀s = 25 and 0.05 μ M for recombinant HDQ51 and in PC12 cells, respectively).¹ It also inhibits polyQ aggregation in organotypic hippocampal slice cultures isolated from R6/2 transgenic mice and reduces neurodegeneration in a dose-dependent manner in a Drosophila model of Huntington's disease. C2-8 (100 and 200 mg/kg) reduces huntingtin aggregate size, reduces neuronal atrophy, and improves motor performance in a rotarod test in the R6/2 transgenic mouse model of Huntington's disease.²

References

- 1. Zhang, X., Smith, D.L., Meriin, A.B., et al. A potent small molecule inhibits polyglutamine aggregation in Huntington's disease neurons and suppresses neurodegeneration in vivo. Proc. Natl. Acad. Sci. U.S.A. 102(3), 892-897 (2005).
- 2. Chopra, V., Fox, J.H., Lieberman, G., et al. A small-molecule therapeutic lead for Huntington's disease: Preclinical pharmacology and efficacy of C2-8 in the R6/2 transgenic mouse. Proc. Natl. Acad. Sci. U.S.A. 104(42), 16685-16689 (2007).

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.

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