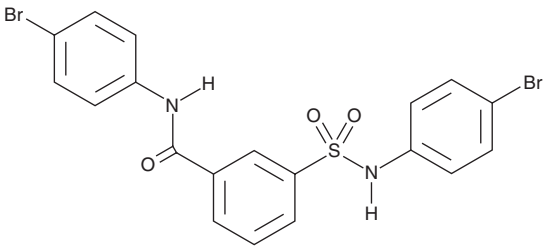
PRODUCT INFORMATION

C2-8

Item No. 21177

CAS Registry No.:	300670-16-0
Formal Name:	N-(4-bromophenyl)-3-[[(4-bromophenyl) amino]sulfonyl]-benzamide
Synonym:	Polyglutamine Aggregation Inhibitor III
MF:	$C_{19}H_{14}Br_2N_2O_3S$
FW:	510.2
Purity:	≥98%
UV/Vis.:	λ_{max}: 230, 274 nm
Supplied as:	A crystalline 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

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 (IC_{50}s = 25 and 0.05 µM 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).

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