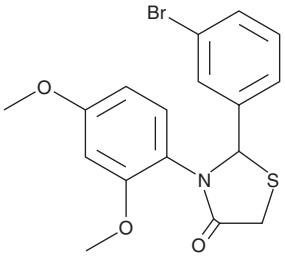
PRODUCT INFORMATION

CK-869

Item No. 15251

CAS Registry No.:	388592-44-7
Formal Name:	2-(3-bromophenyl)-3-(2,4-dimethoxyphenyl)-4-thiazolidinone
Synonym:	CK-0157869
MF:	$C_{17}H_{16}BrNO_3S$
FW:	394.3
Purity:	≥98%
UV/Vis.:	λ_{max}: 278 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

CK-869 is supplied as a crystalline solid. A stock solution may be made by dissolving the CK-869 in the solvent of choice, which should be purged with an inert gas. CK-869 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of CK-869 in these solvents is approximately 2.5 and 1.5 mg/ml, respectively.

CK-869 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CK-869 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. CK-869 has a solubility of approximately 0.05 mg/ml in a 1:20 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

CK-869 is an inhibitor of actin polymerization *via* inhibition of the actin-related protein 2/3 (Arp2/3) complex, leading to reduced cell motility rate and rearrangement of F-actin in M-1 cells.[1] It inhibits comet tail formation by *L. monocytogenes* with an IC_{50} value of 7 µM.[2] It also impairs cell adhesion and cell spreading in MCF10A human breast epithelial cells.[3]

References

1. Ilatovskaya, D.V., Chubinskiy-Nadexhdin, V., Pavlov, T.S., *et al.* Arp2/3 inhibition induces amoeboid-like protrusions in MCF10A epithelial cells by reduced cytoskeletal-membrane coupling and focal adhesion assembly. *Cell Tissue Res.* **354(3)**, 783-792 (2013).
2. Nolen, B.J., Tomasevic, N., Russell, A., *et al.* Characterization of two classes of small molecule inhibitors of Arp2/3 complex. *Nature* **460(7258)**, 1031-1034 (2009).
3. Beckham, Y., Vasquez, R.J., Stricker, J., *et al.* Arp2/3 inhibition induces amoeboid-like protrusions in MCF10A epithelial cells by reduced cytoskeletal-membrane coupling and focal adhesion assembly. *PLoS One* **9(6)**, e100943 (2014).

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