H-89

cAMP-Dependent Protein Kinase Inhibitor
Catalog # tlr-h89

For research use only
Version # 08E09-MM

PRODUCT INFORMATION

**Content:**
- 5 mg H-89

**Storage and stability:**
- H-89 is provided as a solid and shipped at room temperature. Store at -20°C. Solid product is stable 1 year at -20°C.
- Upon resuspension, H-89 should be aliquoted and stored at -20°C. Avoid repeated freeze-thaw cycles. Resuspended product is stable 3 months at -20°C when properly stored.

CHEMICAL PROPERTIES

**CAS number:** 127243-85-0
**Synonym:** 5-isoquinolinesulfonamide, 2HCl
**Formula:** C20H20BrN3O2S2HCl
**Molecular weight:** 519.3
**Solubility:** 50mg/ml in DMSO and ethanol, 25 mg/ml in H2O (heat to dissolve)
**Appearance:** Off-white solid
**Purity:** >99% (HPLC)

![Chemical Structure](image)

DESCRIPTION

H-89 is a selective, potent cell permeable inhibitor of cAMP-dependent protein kinase (PKA). PKA is involved in the TLR-mediated TREM-1 expression on macrophages following LPS stimulation1-2. PKA inhibition with H-89 can also reduce IL-6 expression by 50%


METHODS

**Working concentration:** 10-50 µM

**PKA inhibition:**
To assess the role of PKA, pretreat cells, such as macrophages or HEK293 cells transfected with one or several TLR genes, for 1 h with or without H-89 at 10-50 µM and then incubate at 37°C with the appropriate TLR ligand, such as LPS, for 20 min to 1 hour. Immediately following LPS stimulation, the cell lysates can be used for immunoblotting with anti-TREM-1 antibody. Alternatively, the cell lysates can be used for mRNA quantitation using RT-QPCR and the appropriate primers3. The concentration of cytokines in the supernatant, such as IL-1 and IL-6 can be measured by an enzyme-linked immunosorbent assay (ELISA)3.

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