Product Data Sheet

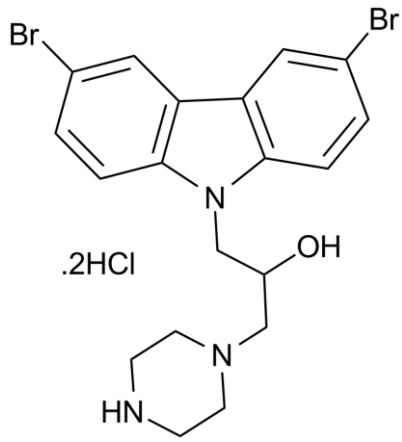
Chemical Properties

Product Name: Bax channel blocker

Cas No.: 335165-68-9

M.Wt: 540.12

Formula: C19H21Br2N3O.2HCl



Chemical Name: 1-(3,6-dibromocarbazol-9-yl)-3-piperazin-1-ylpropan-2-ol;dihydrochloride

Canonical SMILES: C1CN(CCN1)CC(CN2C3=C(C=C(C=C3)Br)C4=C2C=CC(=C4)Br)O.Cl.Cl

Solubility: Soluble in DMSO > 10 mM

Storage: Desiccate at RT

General tips: For obtaining a higher solubility , please warm the tube at 37° C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20° C for several months.

Shopping Condition: Evaluation sample solution : ship with blue ice
All other available size: ship with RT , or blue ice upon request

Biological Activity

Targets : Apoptosis

Pathways: Bcl-2 Family

Description:

IC50: 0.52 μM in Bax assay
Bax channel blocker is an inhibitor of Bax-mediated mitochondrial cytochrome c release.
In the cytosol, cytochrome c is found to form a complex with dATP, Apaf-1, and procaspase-9, which results in caspase 9 activation followed by downstream activation of other caspases, such

as caspase 8, ultimately leading to the cell death. After caspase 8 cleavage, the 15.5 kDa C-terminal fragment of Bid interacts with Bak and Bax.
In vitro: Bax channel blocker, a 3,6-dibromocarbazole derivative, was observed to inhibit cytochrome c releasing from mitochondria by Bax channel modulation. The monohydroxy analogue Bax channel blocker remained the unprecedented inhibition of Bax-induced cytochrome c release at 10 μM. The IC50 value of Bax channel blocker was determined to be 0.52 μM, indicating that Bax channel blocker was a Bax channel inhibitor as hypothesized. Moreover, in the liposome assay, Bax channel blocker showing significant inhibition (>65%) of cytochrome c release at 10 μM also demonstrated sub-micromolar IC50 value [1].
In vivo: So far, there is no animal in vivo study conducted for Bax channel blocker.
Clinical trial: N/A

***Reference**:*

[1] Bombrun A,Gerber P,Casi G,Terradillos O,Antonsson B,Halazy S. 3,6-dibromocarbazole piperazine derivatives of 2-propanol as first inhibitors of cytochrome c release via Bax channel modulation. J Med Chem.2003 Oct 9;46(21):4365-8.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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