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Data Sheet

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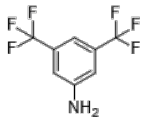
Product Name	:	BTFA
Cat. No.	:	PC-27056
CAS No.	:	328-74-5
Molecular Formula	:	$C_8H_5F_6N$
Molecular Weight	:	229.13
Target	:	P2X Receptor
Solubility	:	10 mM in DMSO



Biological Activity

BTFA is a specific small molecule P2X1 receptor inhibitor, binds to the top of the central vestibule and inhibits cation flux in a dose-dependent manner, inhibits the mixed-cation current of the mP2X1 receptor with IC50 of 4.3 uM.
BTFA also suppresses ATP-induced Ca2+ influx in HEK293 cells overexpressing mP2X1.
BTFA does not induce closure of the P2X1 channel, unlike NF449, which triggers extracellular conformational rearrangements and restores the transmembrane domain to a closed state.
BTFA has no effect on the human P2X2 and human P2X7 receptors, also with minimal inhibitory effects on the human P2X3 receptor.
BTFA binds to the extracellular domain without inducing detectable conformational changes in the extracellular region.

References

Zhang H, et al. Cell Discov. 2026 Jun 4;12(1):41.

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