PRODUCT INFORMATION



TRPM4-IN-5

Item No. 36019

CAS Registry No.:	351424-20-9		
Formal Name:	4-chloro-2-[[2-(2-chlorophenoxy)		
	acetyl]amino]-benzoic acid	CI	
Synonyms:	CBA, Transient Receptor Potential		
	Melastatin 4 Inhibitor 5,		
	TRPM4 Inhibitor 5		
MF:	$C_{15}H_{11}Cl_2NO_4$		
FW:	340.2		
Purity:	≥98%		
UV/Vis.:	λ _{max} : 230, 256 nm	O OH CI	
Supplied as:	A solid	011 0.	
Storage:	-20°C		
Stability:	≥4 years		
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analytical results are provided on each certificate on each certificate on each certificate on each certificat			

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Laboratory Procedures

TRPM4-IN-5 is supplied as a solid. A stock solution may be made by dissolving the TRPM4-IN-5 in the solvent of choice, which should be purged with an inert gas. TRPM4-IN-5 is soluble in DMSO.

Description

TRPM4-IN-5 is an inhibitor of transient receptor potential melastatin 4 (TRPM4; IC_{50} = 1.5 μ M in HEK293 cells expressing TRPM4).¹ It is selective for TRPM4 over TRPM5 at 10 µM and TRPM7, TRPM8, transient receptor potential vanilloid 1 (TRPV1), and TRPV6 at 100 μ M, as well as a panel of 17 other ion channels and receptors at 10 μ M. TRPM4-IN-5 (50 μ M) inhibits persistent firing in isolated mouse thalamic slices stimulated with the small conductance calcium-activated potassium channel (K_{Ca} 2.2/SK2) inhibitor apamin (Item No. 17082).²

References

- 1. Ozhathil, L.C., Delalande, C., Bianchi, B., et al. Identification of potent and selective small molecule inhibitors of the cation channel TRPM4. Br. J. Pharmacol. 175(12), 2504-2519 (2018).
- 2. O'Malley, J.J., Seibt, F., Chin, J., et al. TRPM4 conductances in thalamic reticular nucleus neurons generate persistent firing during slow oscillations. J. Neurosci. 40(25), 4813-4823 (2020).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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