PRODUCT INFORMATION



BI-749327

Item No. 39672

| CAS Registry No.: | 2361241-23-6 | |
|-------------------|-------------------------------------|---------------------|
| Formal Name: | [4-(6-amino-3-pyridazinyl)-1- | |
| | piperidinyl][4-[4-(trifluoromethyl) | Ň NH2 |
| | phenoxy]phenyl]-methanone | |
| MF: | $C_{23}H_{21}F_{3}N_{4}O_{2}$ | $\langle - \rangle$ |
| FW: | 442.4 | |
| Purity: | ≥98% | F |
| Supplied as: | A solid | F (/) 0 |
| Storage: | -20°C | F |
| Stability: | ≥4 years | |
| | | |

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

BI-749327 is supplied as a solid. A stock solution may be made by dissolving the BI-749327 in the solvent of choice, which should be purged with an inert gas. BI-749327 is sparingly soluble (1-10 mg/ml) in DMSO and slightly soluble (0.1-1 mg/ml) in acetonitrile.

Description

BI-749327 is an inhibitor of transient receptor potential canonical 6 (TRPC6; $IC_{50} = 13 \text{ nM}$ for the mouse channel).¹ It is selective for TRPC6 over TRPC3 and TRPC7 ($IC_{50}s = 1,100$ and 550 nM, respectively, for the mouse channels). BI-749327 (100, 250, and 500 nM) inhibits TRPC6-mediated reporter gene expression in HEK293T cells expressing mouse TRPC6. In vivo, BI-749327 (30 mg/kg) decreases myocardial interstitial fibrosis in a mouse model of hypertrophic cardiomyopathy induced by transaortic constriction. It reduces unilateral ureteral obstruction-induced renal fibrosis in mice. BI-749327 (30 mg/kg) also increases survival, decreases myocardial fibrosis, and improves grip strength in a mouse model of Duchenne muscular dystrophy (DMD).²

References

- 1. Lin, B.L., Matera, D., Doerner, J.F., et al. In vivo selective inhibition of TRPC6 by antagonist BI 749327 ameliorates fibrosis and dysfunction in cardiac and renal disease. Proc. Natl. Acad. Sci. USA 116(20), 10156-10161 (2019).
- 2. Lin, B.L., Shin, J.Y., Jeffreys, W.P., et al. Pharmacological TRPC6 inhibition improves survival and muscle function in mice with Duchenne muscular dystrophy. JCI Insight 7(19), e158906 (2022).

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

SAFFTY 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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