

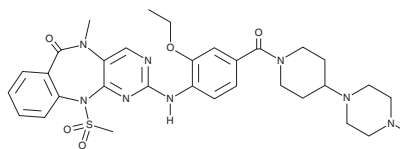
# PRODUCT INFORMATION



**AX-15836**

Item No. 28774

**CAS Registry No.:** 2035509-96-5  
**Formal Name:** 2-[[2-ethoxy-4-[[4-(4-methyl-1-piperazinyl)-1-piperidinyl]carbonyl]phenyl]amino]-5,11-dihydro-5-methyl-11-(methylsulfonyl)-6H-pyrimido[4,5-b][1,4]benzodiazepin-6-one  
**MF:** C<sub>32</sub>H<sub>40</sub>N<sub>8</sub>O<sub>5</sub>S  
**FW:** 648.8  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

## Laboratory Procedures

AX-15836 is supplied as a solid. A stock solution may be made by dissolving the AX-15836 in the solvent of choice, which should be purged with an inert gas. AX-15836 is soluble (≥10 mg/ml) in ethanol and DMSO.

## Description

AX-15836 is an inhibitor of ERK5 (IC<sub>50</sub> = 8 nM).<sup>1</sup> It is selective for ERK5 over a panel of 100 other kinases at 1 μM. AX-15836 (1 μM) inhibits ERK5 autophosphorylation in HeLa cervical cancer cells. It induces apoptosis in combination with ivermectin (Item No. 35518) in A375 melanoma spheroids when used at a concentration of 1 μM.<sup>2</sup> AX-15836 (15 mg/kg per day) also decreases skin thickness and scaling in a mouse model of allergic skin inflammation induced by imiquimod (Item No. 14956).<sup>3</sup>

## References

1. Lin, E.C.K., Amantea, C.M., Nomanbhoy, T.K., *et al.* ERK5 kinase activity is dispensable for cellular immune response and proliferation. *Proc. Natl. Acad. Sci. USA* **113(42)**, 11865-11870 (2016).
2. Lombardi, Z., Gardini, L., Kashchuk, A.V., *et al.* Importin subunit beta-1 mediates ERK5 nuclear translocation, and its inhibition synergizes with ERK5 kinase inhibitors in reducing cancer cell proliferation. *Mol. Oncol.* **19(1)**, 99-113 (2025).
3. Ding, Y., Ouyang, Z., Zhang, C., *et al.* Tyrosine phosphatase SHP2 exacerbates psoriasis-like skin inflammation in mice via ERK5-dependent NETosis. *MedComm* (2020) **3(1)**, e120 (2022).

### 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.

### WARRANTY AND LIMITATION OF REMEDY

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