# PRODUCT INFORMATION



## AX-024 (hydrochloride)

Item No. 27333

CAS Registry No.: 1704801-24-0

Formal Name: 1-[[4-(4-fluorophenyl)-6-methoxy-

> 2H-1-benzopyran-3-yl]methyl]pyrrolidine, monohydrochloride

C<sub>21</sub>H<sub>22</sub>FNO<sub>2</sub> • HCl

375.9 FW: **Purity:** ≥98% Supplied as: A solid Storage: -20°C Stability: ≥4 years • HCI

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

## **Laboratory Procedures**

AX-024 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the AX-024 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. AX-024 (hydrochloride) is soluble in the organic solvent DMSO.

## Description

MF:

AX-024 is an inhibitor of the CD3ε-Nck interaction. It binds to the SH3.1 N-terminal domain of Nck1, preventing its binding to the proline-rich sequence of the CD3ε subunit of T cells. AX-024 inhibits T cell receptor-triggered T cell activation ( $IC_{50} = 1$  nM for human T cells) and selectively decreases proliferation of T cells over B cells. It prevents CD4<sup>+</sup> T cell and macrophage infiltration to the cerebellum and spinal cord and improves neurological impairments in a MOG<sub>35-55</sub> mouse model of experimental autoimmune encephalomyelitis (EAE) when administered at a dose of 10 mg/kg per day for ten days starting on the day of immunization. AX-024 (50 mg/kg) prevents the infiltration of eosinophils, macrophages, and neutrophils into the airway, as well as prevents an increase in IL-4 levels in bronchoalveolar lavage fluid (BALF), in an ovalbumin-sensitized mouse model of allergic airway disease. It does not prevent the memory T cell response to an immunodominant B8R poxvirus antigen peptide or to infection by ectromelia virus (mousepox).

#### Reference

1. Borroto, A., Reyes-Garau, D., Jiménez, M.A., et al. First-in-class inhibitor of the T cell receptor for the treatment of autoimmune diseases. Sci. Transl. Med. 8(370), 370ra184 (2016).

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

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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