# PRODUCT INFORMATION



## Acumapimod

Item No. 25832

CAS Registry No.: 836683-15-9

Formal Name: 3-[5-amino-4-(3-cyanobenzoyl)-1H-

pyrazol-1-yl]-N-cyclopropyl-4-methyl-

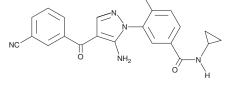
benzamide

Synonym: **BCT-197** MF: C22H19N5O2 FW: 385.4

**Purity:** UV/Vis.:  $\lambda_{\text{max}}$ : 212, 315 nm Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

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



### **Laboratory Procedures**

Acumapimod is supplied as a crystalline solid. A stock solution may be made by dissolving the acumapimod in the solvent of choice, which should be purged with an inert gas. Acumapimod is soluble in the organic solvent DMSO.

#### Description

Acumapimod is an inhibitor of p38 $\alpha$  MAPK (IC<sub>50</sub> = <1  $\mu$ M).<sup>1</sup> It increases survival and reduces the number of macrophages in bronchoalveolar lavage fluid (BALF) in a mouse model of infection with influenza H1N1 A/PR/8/34 when administered at a dose of 6 mg/kg.2 Acumapimod (3 mg/kg) reduces the number of neutrophils in BALF in rats exposed to aerosolized LPS alone or in combination with tobacco smoke.3 It also inhibits airway epithelium mucus hyperplasia in rats exposed to aerosolized LPS and tobacco smoke  $(ED_{50} = 0.3 \text{ mg/kg}).$ 

#### References

- 1. Fryszman, O.M., Lang, H., Lan, J., et al. 5-membered heterocycle-based p38 kinase inhibitors. Triad Therapeutics, Inc. WO 2005/009973 AI (2005).
- 2. Growcott, E.J., Bamba, D., Galarneau, J.R., et al. The effect of P38 MAP kinase inhibition in a mouse model of influenza. J. Med. Microbiol. 67(3), 452-463 (2018).
- 3. Parkin, J.M. and Hardaker, E.L. Effects of acumapimod (bct197), an oral p38 inhibitor, on tobacco smoke and lipopolysaccharide-induced lung inflammation in a corticosteroid-resistant rat model. Am. J. Respir. Crit. Care Med. 195:A6305, (2017).

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.

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