# PRODUCT INFORMATION



# CAY10763

Item No. 30593

CAS Registry No.: 2364458-49-9

Formal Name:  $(\alpha R)-\alpha-[[1,4-dihydro-4-(hydroxyimino)-$ 

> 1-oxo-2-naphthalenyl]amino]-N-(3,5dimethoxyphenyl)-benzenepropanamide

MF:  $C_{27}H_{25}N_3O_5$ 

471.5 FW: ≥98% **Purity:** UV/Vis.:

 $\lambda_{max}$ : 242 nm Supplied as: A solid Storage: -20°C Stability: ≥2 years

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

### **Laboratory Procedures**

CAY10763 is supplied as a solid. A stock solution may be made by dissolving the CAY10763 in the solvent of choice, which should be purged with an inert gas. CAY10763 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of CAY10763 in these solvents is approximately 30 mg/ml.

#### Description

CAY10763 is a dual inhibitor of indolamine 2,3-dioxygenase 1 (IDO1;  $IC_{50} = 46 \text{ nM}$ ) and STAT3 activation.<sup>1</sup> It binds to STAT3 ( $K_d$  = 530 nM) and selectively reduces the levels of STAT3 phosphorylated at the tyrosine in position 705 (STAT3<sup>Y705</sup>) over phosphorylated STAT3<sup>S727</sup>, STAT1, and STAT5 in SKOV3 cells when used at a concentration of 500 nM. It also inhibits STAT3 nuclear translocation in SKOV3 cells. CAY10763 is cytotoxic to HCT116, SKOV3, A549, and HepG2 cancer cells ( $IC_{50}$ S = 37, 28, 33, and 12 nM, respectively). It reduces tumor growth in a B16/F10 murine melanoma model and a HepG2 mouse xenograft model when administered at doses of 100 and 10 mg/kg, respectively.

#### Reference

1. Huang, R., Jing, X., Huang, X., et al. Bifunctional naphthoquinone aromatic amide-oxime derivatives exert combined immunotherapeutic and antitumor effects through simultaneous targeting of indoleamine-2,3-dioxygenase and signal transducer and activator of transcription 3. J. Med. Chem. 63(4), 1544-1563 (2020).

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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