# PRODUCT INFORMATION



# ER-819762

Item No. 10531

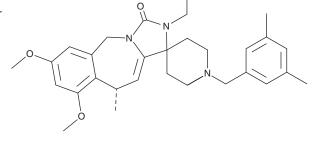
CAS Registry No.: 1155773-15-1

Formal Name: (10S)-1'-[(3,5-dimethylphenyl)

> methyl]-2-ethyl-5,10-dihydro-7,9dimethoxy-10-methyl-spiro[1Himidazo[1,5-b][2]benzazepine-

1,4'-piperidin]-3(2H)-one

MF:  $C_{30}H_{39}N_3O_3$ 489.7 FW: **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**

ER-819762 is supplied as a solid. A stock solution may be made by dissolving the ER-819762 in the solvent of choice, which should be purged with an inert gas. ER-819762 is soluble in the organic solvent DMSO at a concentration of approximately 50 mg/ml.

#### Description

ER-819762 is an antagonist of the prostaglandin E2 (PGE2; Item No. 14010) receptor subtype EP4  $(IC_{50} = 70 \text{ nM}).^{1}$  It is selective for EP<sub>4</sub> over EP<sub>1</sub>, EP<sub>2</sub>, and  $\tilde{EP}_{3}$  in a cAMP reporter assay at 10  $\mu$ M. ER-819762 reduces differentiation of mouse helper T cells when used at concentrations ranging from 0.1 to 10 nM and decreases IL-23 secretion by mouse dendritic cells from 0.04 to 5 nM. It also reduces the levels of Marek's disease virus (MDV) in chicken embryonic fibroblasts (CEFs) when used at a concentration of  $1 \mu M$ . Oral administration of ER-819762 (30 and 100 mg/kg) prevents and reverses paw swelling, edema, and inflammation in a mouse model of rheumatoid arthritis induced by glucose-6-phosphate isomerase (GPI).1

## References

- 1. Chen, Q., Muramoto, K., Masaaki, N., et al. A novel antagonist of the prostaglandin E<sub>2</sub> EP<sub>4</sub> receptor inhibits Th1 differentiation and Th17 expansion and is orally active in arthritis models. Br. J. Pharmacol. 160(2), 292-310 (2010).
- 2. Boodhoo, N., Kamble, N., Kaufer, B.B., et al. Replication of Marek's disease virus is dependent on synthesis of de novo fatty acid and prostaglandin E2. J. Virol. 93(13), e00352-19 (2109).

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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