BioVision 07/16

PRODUCT: Apilimod mesylate

ALTERNATE NAME: (E)-4-(6-(2-(3-methylbenzylidene)hydrazinyl)-2-(2-(pyridin-2-

yl)ethoxy)pyrimidin-4-yl)morpholine dimethanesulfonate

CATALOG #: B1129-5, 25

AMOUNT: 5 mg, 25 mg

STRUCTURE:

MOLECULAR FORMULA: C₂₅H₃₄N₆O₈S₂

MOLECULAR WEIGHT: 610.7

CAS NUMBER: 870087-36-8

APPEARANCE: White to off-white solid

SOLUBILITY: DMSO

PURITY: ≥98% by HPLC

STORAGE: Store at -20°C. Protect from air and moisture

DESCRIPTION: Apilimod is a small molecule that inhibits IL-12 and IL-23

production - cytokines that are involved in autoimmune diseases through the prevention of nuclear translocation of c-Rel. It suppresses the Th1, but not the Th2, response, resulting in reduced inflammation in a mouse model of inflammatory bowel disease. Apilimod inhibits the production of IL-23p19 and IL-12/IL-23p40 subunits while decreasing skin inflammation in a clinical study of patients with psoriasis. Apilimod inhibits phosphatidylinositol-3-phosphate 5-kinase (PIKfyve; IC $_{50}$ = 14 nM), which is necessary and sufficient for suppression of IL-12/IL-23p40 expression. It was discovered

to potently inhibit SARS-CoV-2 in a drug screen.

REFERENCES: Billich, A., et al. (2007). Drugs 10, 53-59.

HANDLING: Do not take internally. Wear gloves and mask when handling

the product! Avoid contact by all modes of exposure.

RELATED PRODUCTS:

APY-0201 (9564) YM201636 (2045)

IL-2, human recombinant (4161) IL-2, rat recombinant (4163)

Human CellExp™ IL-2, human recombinant **(6467)** Human CellExp™ IL-2, mouse recombinant **(4719)**

USAGE: FOR RESEARCH CH USE ONLY! Not to be used in humans