# PRODUCT INFORMATION



MK-0557

Item No. 22134

CAS Registry No.: 328232-95-7 Formal Name: trans-N-[1-(2-fluorophenyl)-1H-pyrazol-

3-yl]-1'-oxo-spiro[cyclohexane-1,3'(1'H)-

furo[3,4-c]pyridine]-4-carboxamide

MF:  $C_{22}H_{19}FN_4O_3$ 

406.4 FW: **Purity:** ≥98% UV/Vis.:  $\lambda_{\text{max}}$ : 271 nm A crystalline solid Supplied as:

Storage: -20°C Stability: ≥4 years

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

### **Laboratory Procedures**

MK-0557 is supplied as a crystalline solid. A stock solution may be made by dissolving the MK-0557 in the solvent of choice. MK-0557 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of MK-0557 in these solvents is approximately 3 and 5 mg/ml, respectively.

MK-0557 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, MK-0557 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. MK-0557 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

MK-0557 is a potent antagonist of the neuropeptide Y (NPY) receptor  $Y_5$  (K<sub>i</sub>s = 1.3, 0.79, 0.74, and 1.4 nM for human, rhesus monkey, mouse, and rat receptors, respectively).1 It is >7,500-fold selective for  $Y_5$  over other NPY receptors and lacks activity in a panel of 180 receptors, enzymes, and ion channels at concentrations up to 1 μM. MK-0557 increases intracellular calcium in CHO cells expressing the human  $Y_5$  receptor in a concentration-dependent manner. In vivo, MK-0557 (30 mg/kg) reduces body weight gain in wild-type and diet-induced obese mice. It also reduces retroperitoneal fat pad weight, epididymal and mesenteric fat pad weights, leptin levels, and food intake in lean mice fed a high-fat diet.

### Reference

1. Erondu, N., Gantz, I., Musser, B., et al. Neuropeptide Y<sub>5</sub> receptor antagonism does not induce clinically meaningful weight loss in overweight and obese adults. Cell Metab. 4(4), 275-282 (2006).

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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