# PRODUCT INFORMATION



**PS-10** 

Item No. 42068

CAS Registry No.: 1564265-82-2

Formal Name: 2-[(2,4-dihydroxyphenyl)sulfonyl]-

2,3-dihydro-1H-isoindole-4,6-diol

MF:  $C_{14}H_{13}NO_6S$ 

FW: 323.3 **Purity:** ≥98% A 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**

PS-10 is supplied as a solid. A stock solution may be made by dissolving the PS-10 in the solvent of choice, which should be purged with an inert gas. PS-10 is sparingly soluble (1-10 mg/ml) in DMSO and slightly soluble (0.1-1 mg/ml) in acetonitrile.

### Description

PS-10 is an inhibitor of pyruvate dehydrogenase kinase (PDHK; IC $_{50}$ s = 2.07, 0.8, 21.3, and 0.77  $\mu$ M for PDHK1, -2, -3, and -4, respectively).<sup>1</sup> It selectively binds to PDHK2 over heat shock protein 90 (Hsp90;  $K_{H}s$  = 0.239 and 47  $\mu$ M, respectively). PS-10 (70 mg/kg) increases heart, liver, and kidney pyruvate dehydrogenase complex activity, decreases blood glucose levels in a glucose tolerance test, and reduces plasma lactate, cholesterol, and triglyceride levels, fat mass, and hepatic lipid accumulation in a mouse model of high-fat diet-induced obesity.

### Reference

1. Tso, S.-C., Qi, X., Gui, W.-J., et al. Structure-guided development of specific pyruvate dehydrogenase kinase inhibitors targeting the ATP-binding pocket. J. Biol. Chem. 289(7), 4432-4443 (2014).

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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