

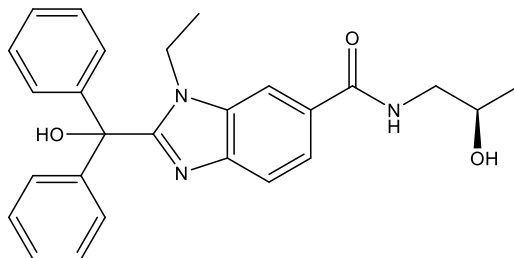
Catalog # 10-4096

VY-3-135

CAS# 1824637-41-3

3-Ethyl-2-[hydroxy(diphenyl)methyl]-N-[(2R)-2-hydroxypropyl]benzimidazole-5-carboxamide

Lot # FBA8182



VY-3-135 is a potent ($IC_{50} = 44$ nM) and selective inhibitor of acetyl-CoA synthetase 2 (ACSS2), an enzyme that is upregulated in nutrient-stressed cancer cells.¹ It completely blocked fatty acid synthesis from acetate in SKBR3 breast cancer cells. VY-3-135 caused growth inhibition of mouse and human triple negative breast cancer cells that expressed high levels of ACSS2 but not those that expressed low levels. It displayed no effects on gene regulation.

- 1) Miller *et al.* (2021), *Targeting ACSS2 with a transition state mimetic inhibits triple negative breast cancer growth*; Cancer Res. **81** 1252

PHYSICAL DATA

Molecular Weight:	429.52
Molecular Formula:	C ₂₆ H ₂₇ N ₃ O ₃
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (>25 mg/ml)
Physical Description:	Off-white to pale yellow solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

Focus Biomolecules LLC 400 Davis Drive, Suite 600 Plymouth Meeting PA 19462

www.focusbiomolecules.com