



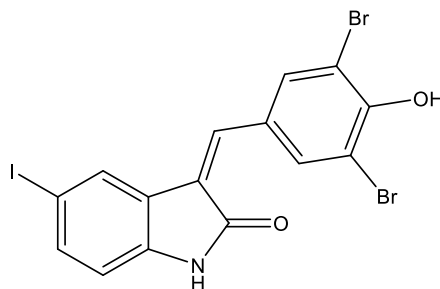
Catalog # 10-1031

GW-5074

CAS# 220904-83-6

3-(3,5-Dibromo-4-hydroxybenzylidene)-5-iodo-1,3-dihydroindol-2-one

Lot # FBM3016



Potent inhibitor of cRAF1 kinase ($IC_{50} = 9$ nM).¹ Displays 100-fold selectivity for cRAF1 over CDK1, CDK2, c-src, ERK2, MEK, p38, Tie2, VEGFR2 and c-fm. Displays neuroprotective effects *In vivo* via a mechanism that is independent of MEK, ERK, and Akt signaling. GW-5074 was able to reduce mutant huntingtin protein (mHTT) levels but not wild-type *via* linking mHTT to LC3 leading to autophagic degradation.⁵ A promising new strategy in the field of targeted protein degradation via utilization of autophagy. Cell permeable.

- 1) Lackey *et al.* (2000), *The discovery of potent cRaf1 kinase inhibitors*; Bioorg. Med. Chem. Lett., **10** 223
- 2) Chang *et al.* (2005), *Phorbol 12-myristate 13-acetate upregulates cyclooxygenase-2 expression in human pulmonary epithelial cells via Ras, Raf-1, ERK, and NF-kappaB, but not p38 MAPK pathways*; Cell Signal., **217** 299
- 3) Huang *et al.* (2006), *Fibroblast growth factor-2 suppresses oridonin-induced L929 apoptosis through extracellular signal-regulated kinase-dependent and phosphatidylinositol 3-kinase-independent pathway*; J. Pharmacol. Sci., **102** 305
- 4) Chen *et al.* (2004), *Bradykinin B2 receptor mediates NF-kappaB activation and cyclooxygenase-2 expression via the Ras/Raf-1/ERK pathway in human airway epithelial cells*; J. Immunol., **173** 5219
- 5) Li *et al.* (2019), *Allele-selective lowering of mutant HTT protein by HTT-LC3 linker compounds*; Nature **575** 203

PHYSICAL DATA

Molecular Weight:	520.95
Molecular Formula:	C ₁₅ H ₈ Br ₂ INO ₂
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (50 mg/ml)
Physical Description:	Yellow solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Protect from exposure to moisture. Solutions in DMSO may be stored at -20°C for up to 1 month.

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