

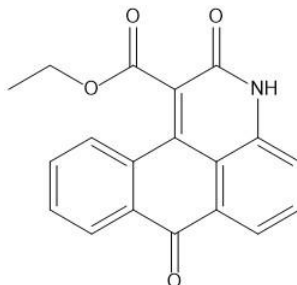
Catalog # 10-5144

NQDI-1

CAS# 175026-96-7

2,7-dihydro-2,7-dioxo-3H-naphtho[1,2,3-de]quinoline-1-carboxylic acid, ethyl ester

Lot # X109177



Potent and selective inhibitor of apoptosis signal-regulating kinase 1 (ASK1), $K_i = 500$ nM.¹ Promotes survival of induced pluripotent stem cells.² Improves neurological function after intracerebral hemorrhage in a mouse model.³ A highly useful inhibitor for probing the involvement of ASK1 in cellular physiology.^{4,5}

- 1) Volynets *et al.* (2011), *Identification of 2H-naphtho[1,2,3-de]quinoline-2,7-diones as inhibitors of apoptosis signal-regulating kinase 1 (ASK1)*; J. Med. Chem., **54** 2680
- 2) Nomura *et al.* (2013), *An ASK1-p38 signaling pathway mediates hydrogen peroxide-induced toxicity in NG108-15 neuronal cells*; Neurosci. Lett., **549** 163
- 3) Chen *et al.* (2019), *The MC4 receptor agonist RO27-3225 inhibits NLRP1-dependent neuronal pyroptosis via the ASK1/JNK/p38 MAPK pathway in a mouse model of intracerebral haemorrhage*; Br. J. Pharmacol., **176** 1341
- 4) Ma *et al.* (2019), *Low glucose and metformin-induced apoptosis of human ovarian cancer cells is connected to ASK1 via mitochondrial and endoplasmic reticulum stress associated pathways*; J. Exp. Clin. Cancer Res., **38** 77
- 5) Feng *et al.* (2018), *Dual function of peroxiredoxin I in lipopolysaccharide-induced osteoblast apoptosis via reactive oxygen species and the apoptosis signal-regulating kinase 1 signaling pathway*; Cell Death Discov., **4** 47

PHYSICAL DATA

Molecular Weight:	319.31
Molecular Formula:	C ₁₉ H ₁₃ NO ₄
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 3 mg/ml)
Physical Description:	Yellow solid
Storage and Stability:	Store as supplied desiccated 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 month.

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