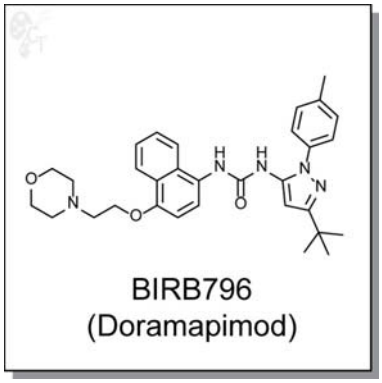
Product Specification Sheet

Product Name: BIRB796 (Doramapimod)

Catalog Number: C2796



Technical information:

Chemical Formula:	$C_{31}H_{37}N_5O_3$
CAS #:	285983-48-4
Molecular Weight:	527.66
Purity:	> 98%
Appearance:	White solid
Solubility:	Soluble in DMSO up to 100 mM
Chemical Name:	1-(3-tert-butyl-1-p-tolyl-1H-pyrazol-5-yl)-3-(4-(2-morpholinoethoxy)naphthalen-1-yl)urea - See more at: http://www.selleckchem.com/products/BIRB-796-(Doramapimod).html#sthash.FpSrDH3J.dpuf
Storage:	Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.
Shelf Life:	In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.

Handling:

- To make 10 mM stock solution, add 0.19mL of DMSO for each mg of BIRB796 (Doramapimod).
- For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

Biological Activity:

BIRB796 (Doramapimod) is a pyrazole-based allosteric inhibitor of p38 MAP Kinase with a Kd of 0.1 nM. BIRB796 has slow binding kinetics, as evidenced by an marked increase in apparent IC50 after preincubation periods up to 2h, as well as dissociation rates of up to six orders of magnitude greater when compared to other MAPK inhibitors. (1) BIRB796 possesses an excellent selectivity profile over a panel of relevant kinases, with the most active being inhibition of JNK2a2 at 100 nM (330-fold selectivity). (2)

Related studies have shown that BIRB796 also inhibits activity and activation of SAPK3/p38g (3% remaining activity at 10 uM). At these concentrations, BIRB796 blocks stress-induced

Reference:

1. Pargellis et al., Inhibition of p38 MAP kinase by utilizing a novel allosteric binding site. Nat. Struct. Biol. 2002, 9(4), 268-272. Pubmed ID: 11896401
2. Regan et al., Pyrazole Urea-Based Inhibitors of p38 MAP Kinase: From Lead Compound to Clinical Candidate. J. Med. Chem. 2002, 45, 2994-3008. Pubmed ID: 12086485
3. Kuma et al., BIRB796 Inhibits All p38 MAPK Isoforms in Vitro and in Vivo. J. Biol. Chem. 2005, 280(20), 19472-19479. Pubmed ID: 15755732

To reorder: http://www.cellagentech.com/BIRB796-Doramapimod/

For Technical Support: technical@cellagentech.com

Chemicals are sold for research use only, not for clinical or diagnostic use.