

## Product Specification Sheet

**Product Name:** Skepinone-L

**Catalog Number:** C7537

### Technical information:

Chemical Formula:  $C_{24}H_{21}F_2NO_4$

CAS #: 1221485-83-1

Molecular Weight: 425.42

Purity: > 99%

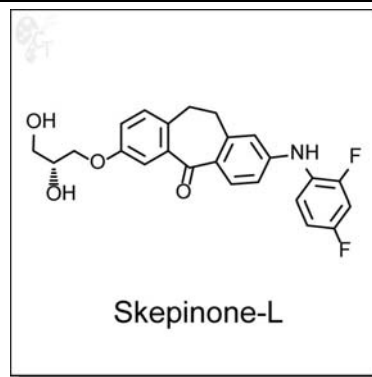
Appearance: Yellow solid

Solubility: Soluble in DMSO up to 22 mM

Chemical Name: (R)-2-((2,4-difluorophenyl)amino)-7-(2,3-dihydroxypropoxy)-10,11-dihydro-5H-dibenzo[a,d][7]annulen-5-one

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 0.235mL of DMSO for each mg of Skepinone-L.
  - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

**Biological Activity:** Skepinone-L is an ATP-competitive, dibenzosuberone-based inhibitor of p38-MAPK and TNF- $\alpha$ , with IC<sub>50</sub> values of 5 and 40 nM, respectively. [1] At 1000 nM, Skepinone-L (K<sub>d</sub> = 1.5 nM) did not inhibit any other member of an Ambit panel of 402 kinases. [2]

In vitro HeLa cell assays determined that Skepinone-L showed a concentration-dependent inhibition of HSP27 (Ser82) phosphorylation at an IC<sub>50</sub> of 25 nM. [2]. Furthermore, Skepinone-L reduced concentrations of well known p38 MAPK substrates, such as IL-1 $\beta$  and IL10 (IC<sub>50</sub> = 30-50 nM). [2]

- Reference:**
1. Koeberle et al., Design, synthesis, and biological evaluation of novel disubstituted dibenzosuberones as highly potent and selective inhibitors of p38 mitogen activated protein kinase. J. Med. Chem. 2012, 55, 5868-5877. Pubmed ID: 22676210
  2. Koeberle et al., Skepinone-L is a selective p38 mitogen-activated protein kinase inhibitor. Nat. Chem. Biol. 2012, 8, 141-143. Pubmed ID: 22198732

To reorder: <http://www.cellagentech.com/Skepinone-L/>

For Technical Support: [technical@cellagentech.com](mailto:technical@cellagentech.com)

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