

Product Name : Tripolin A

Synonyms : —

Cat No. : M22111

CAS Number : 1148118-92-6

Molecular Formula : C₁₅H₁₁NO₃

Formula Weight : 253.25

Chemical Name : —

Description : Tripolin A is a specific non-ATP competitive inhibitor of Aurora A kinase (Aurora A and Aurora B with IC₅₀ values of 1.5 μM and 7 μM, respectively). Tripolin A, a non-ATP competitive inhibitor, reduced the localization of pAurora A on spindle microtubules (MTs), affected centrosome integrity, spindle formation and length, as well as MT dynamics in interphase, consistent with Aurora A inhibition by RNAi or other specific inhibitors, such as MLN8054 or MLN8237. Interestingly, Tripolin A affected the gradient distribution towards the chromosomes, but not the MT binding of HURP (Hepatoma Up-Regulated Protein), a MT-associated protein (MAP) and substrate of the Aurora A kinase. Therefore Tripolin A reveals a new way of regulating mitotic MT stabilizers through Aurora A phosphorylation.

Pathway : Cell Cycle/DNA Damage

Target : Aurora Kinase

Receptor : Aurora A

Solubility : —

SMILES : Oc3cc(C=C1C2CCCC2NC1=O)c(O)cc3

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1. Iliana A Kesisova, et al. Tripolin A, a Novel Small-Molecule Inhibitor of Aurora A Kinase, Reveals New Regulation of HURP's Distribution on Microtubules. PLoS One. 2013;8(3):e58485.