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产品名称: **M-110**  
产品别名: **M-110**

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| <b>生物活性:</b>       |  |
| <b>Description</b> | M-110 is a highly selective, ATP-competitive inhibitor of PIM kinases with a preference for PIM-3 ( $IC_{50}=47$ nM). M-110 inhibits PIM-1 and PIM-2 with similar $IC_{50}$ s of 2.5 $\mu$ M. M-110 inhibits the proliferation of prostate cancer cell lines with $IC_{50}$ s of 0.6 to 0.9 $\mu$ M <sup>[1]</sup> .   |
| <b>In Vitro</b>    | M-110 (0.01-10 $\mu$ M; 72 hours) inhibiting the growth of DU-145 cells with an $IC_{50}$ value of 0.9 $\mu$ M <sup>[1]</sup> . M-110 has no activity on normal human peripheral blood mononuclear cells up to 40 $\mu$ M <sup>[1]</sup> .<br>M-110 (10 $\mu$ M; 18 hours) inhibits STAT3 Tyr705 phosphorylation <sup>[1]</sup> .<br>M-110 inhibits the expression of active STAT3 through inhibition of PIM-3. M-110 also inhibits the proliferation of 22Rv1, PC3, and SW480 cells, with $IC_{50}$ values of 0.6 to 0.8 $\mu$ M <sup>[1]</sup> .   |
|                    | <b>Cell Viability Assay<sup>[1]</sup></b>  |
|                    | Cell Line: DU-145 cells  |
|                    | Concentration: 0.01, 0.1, 1, 10 $\mu$ M  |
|                    | Incubation Time: 72 hours  |
|                    | Result: Inhibiting the growth of DU-145 cells with an $IC_{50}$ value of 0.9 $\mu$ M.  |
|                    | <b>Western Blot Analysis<sup>[1]</sup></b>   |
|                    | Cell Line: DU-145 cells  |
|                    | Concentration: 10 $\mu$ M  |
|                    | Incubation Time: 18 hours  |
|                    | Result: Reduced the expression of p-STAT3 Tyr705 to 23.5%, compared with untreated cells without affecting the expression of STAT3.  |
| <b>References</b>  | <p>[1]. Ther. 2010 Sep;9(9):2478-87. Cancer Chang M, et al. PIM kinase inhibitors downregulate STAT3(Tyr705) phosphorylation. Mol</p> <p>[2]. He Y, et al. Schisantherin A suppresses osteoclast formation and wear particle-induced osteolysis via modulating RANKL signaling pathways. Biochem Biophys Res Commun. 2014 Jul 4;449(3):344-50.</p> <p>[3]. Zhou E, et al. Schisantherin A protects lipopolysaccharide-induced acute respiratory distress syndrome in mice through inhibiting NF-<math>\kappa</math>B and MAPKs signaling pathways. Int Immunopharmacol. 2014 Sep;22(1):133-40.</p> <p>[4]. Sa F, et al. Discovery of novel anti-parkinsonian effect of schisantherin A in in vitro and in vivo. Neurosci Lett. 2015 Apr 23;593:7-12.</p> <p>[5]. Zhang LQ, et al. Schisantherin A protects against 6-OHDA-induced dopaminergic neuron damage in zebrafish and cytotoxicity in SH-SY5Y cells through the ROS/NO and AKT/GSK3<math>\beta</math> pathways. J Ethnopharmacol. 2015 Apr 29. pii: S0378-8741(15)00306-2.</p> |