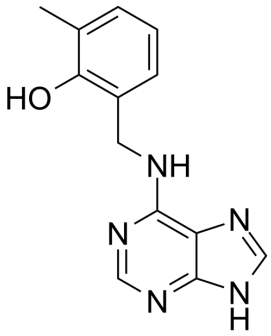
PI-55

Cat. No.:	HY-141519
CAS No.:	1122579-42-3
Molecular Formula:	$C_{13}H_{13}N_5O$
Molecular Weight:	255.28
Target:	Parasite; Others
Pathway:	Anti-infection; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	PI-55 is a specific cytokinin receptor inhibitor. PI-55 is structurally related to 6-benzylaminopurine (BAP) and was shown to inhibit competitively BAP binding on Arabidopsis-specific receptors CRE1/AHK4 and AHK3. PI-55 inhibits cytokinins induced haustorium formation and increased parasite aggressiveness[1].
IC_{50} & Target	Cytokinin receptor[1]. Parasiter[1]
In Vitro	PI-55 at high concentrations (10 μM and 100 μM), which causes an incomplete blocking of early haustorial structure development, especially when cytokinin activity promotes it. PI-55 treatment also reduces the overall aggressiveness of P. ramosa when applied with BAP in comparison with BAP alone, suggesting that the signaling pathway leading to early haustorial structure formation involves histidine kinase receptors homologous to CRE1/AHK4 and AHK3[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Goyet V, et al. Haustorium initiation in the obligate parasitic plant Phelipanche ramosa involves a host-exudated cytokinin signal. J Exp Bot. 2017;68(20):5539-5552.

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