

Active auxin antagonist for TIR1/AFB receptors



MOST active auxin antagonist for TIR1/AFB receptors

PEO-IAA and auxinole can dissolves in polar organic solvents, MeOH, EtOH, DMF, DMSO, acetone.
Compounds (powder) can be stored in refrigerator (<0 C).</li>
The DMSO stock solution is stable under -15C
PEO-IAA and auxinole can be decomposed by Autoclave (120C, 20min).
Addition of half volume of EtOH to DMSO stock solution can sterilize the stock solution before dilution.

Effective dose are 5-50 uM inArabidopsis auxin assay.

Please cite two papers when publish

1: Hayashi K, Neve J, Hirose M, Kuboki A, Shimada Y, Kepinski S, Nozaki H. Rational design of an auxin antagonist of the SCF(TIR1) auxin receptor complex. ACS Chem Biol. 2012 Mar 16;7(3):590-8. Epub 2012 Jan 24. PubMed PMID: 22234040.

2: Hayashi K, Tan X, Zheng N, Hatate T, Kimura Y, Kepinski S, Nozaki H. Small-molecule agonists and antagonists of F-box protein-substrate interactions in auxin perception and signaling. Proc Natl Acad Sci U S A. 2008 Apr 8;105(14):5632-7. Epub 2008 Apr 7. PubMed PMID: 18391211; PubMed Central PMCID: PMC2291130.

DR5::GUS and BA3::GUS are auxin-responsive reporter line.

pDR5 is derived form GH3 promoter. pBA3 is derived from pSIAA4/5 (Aux/IAA) Plant Cell. 1998 Oct;10(10):1649-62.