

Antitumoral Phortress Small Molecule (Tool Compound)

Catalogue number: 151839

Sub-type: Antitumoral

Images:

Contributor

Inventor: Malcolm F G Stevens

Institute: University of Nottingham

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Antitumoral Phortress Small Molecule (Tool Compound)

Alternate name:

Class:

Conjugate:

Description: The Antitumoral Phortress compound is a potential anticancer agent for treatment of human breast carcinoma. Phortress is highly selective for susceptible cancer cells because of its mechanism of action. Following the release of 5F 203 from Phortress, it activates AhR signalling and causes induction of cytochrome P450 activity, which metabolically bioactivates 5F 203 to a cytotoxic species at the tumour site. Phortress (the dihydrochloride salt of the lysylamide prodrug of 2-(4-amino-3-methylp...

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes: Compound available for screening or similar studies. For larger quantities (>20mg) please contact Ximbio. **Product Documents:** [Phortress Diode Array](#)

[Phortress NMR](#)

[Target details](#)

[Target:](#)

[Target alternate names:](#)

[Target background:](#)

[Molecular weight:](#) 459.41

[Ic50:](#) IC50 values for MCF-7 and MDA468 cells are 40 nM and 158 nM, respectively

[Applications](#)

Application: Active against breast, ovarian and renal carcinomas. Taken up into sensitive cells followed by aryl hydrocarbon receptor binding and translocation into the nucleus. Requires metabolic activation by cytochrome P450 to generate cytotoxic species. Induces expression of CYP1A1 and generates adducts in the DNA of sensitive MCF7 and IGROV-1 cells.

Application notes:

[Handling](#)

[Format:](#)

[Concentration:](#)

[Passage number:](#)

[Growth medium:](#)

[Temperature:](#)

[Atmosphere:](#)

[Volume:](#)

[Storage medium:](#)

[Storage buffer:](#)

[Storage conditions:](#)

[Shipping conditions:](#) Dry Ice

[Related tools](#)

[Related tools:](#)

References

References: [Elizabeth Deeves. 2012. PhD thesis. Novel functions of the MOZ double PHD finder domain.](#)

CancerTools.org