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DATASHEET

Mifepristone

Product overview

Name	Mifepristone
Cat No	HB2783
Alternative names	RU486 | RU38486
Biological action	Antagonist
Purity	>99%
Description	Potent glucocorticoid and progesterone receptor antagonist. Also used for gene editing as a mifepristone inducible Cas9 and Cpf1 CRISPR effector.

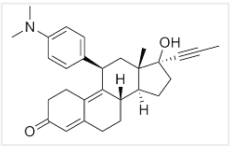
Biological Data

Biological description	Potent glucocorticoid (GR) and progesterone receptor (PR) antagonist (EC_{50} values are 2, 10.6 and 9.5 nM at GR, PR-A and PR-B respectively). Also weakly binds the androgen receptor. Shows higher affinity for PRs than progesterone. Shows neuroprotective and antitumor effects. Active *in vivo*. Also used for gene editing as a mifepristone inducible Cas9 and Cpf1 CRISPR effector.

Solubility & Handling

Storage instructions	Room temperature
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

Chemical Data

Chemical name	(11β,17β)-11-[4-(Dimethylamino)phenyl]-17-hydroxy-17-(1-propynyl)-estra-4,9-dien-3-one
Molecular Weight	429.6
Chemical structure	
Molecular Formula	$C_{29}H_{35}NO_2$
CAS Number	84371-65-3
PubChem identifier	55245
SMILES	[H][C@@]23CCC1=CC(CCC1=C2[C@@H]([C@]5=CC=C(N(C)C)C=C5)C[C@@]4(C)[C@]([H])3CC[C@@](C#CC)4O)=O
InChiKey	VKHAHZOOUSRJNA-GCNJZUOMSA-N

References

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The chemopreventive effect of mifepristone on mammary tumorigenesis is associated with an anti-invasive and anti-inflammatory gene signature.

Yuan H *et al* (2012) Cancer Prev Res (Phila) 5(5)
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Rakotomamonjy J *et al* (2011) FASEB J 25(11)
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Binding of the anti-progestin RU-486 to rat ovary steroid receptors.

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