



Catalog Number:	MC11109	Product Type:	Small Molecule
Bio-Activity:	Microtubule stabilizing agent	CAS #:	114977-28-5
Research Categories:	Cell death, cancer	Chemical Name:	N-Debenzoyl-N-(t-butoxycarbonyl)-10-deacetyltaxol
Solubility:	Soluble in DMSO (up to 25 mg/ml) or in Ethanol (up to 25 mg/ml).	Molecular Formula:	C43H53NO14
Purity:	> 98%	Molecular Weight:	807.9
Format:	Powder	Ship Temp:	Ambient
Storage:	-20°C		

Application Notes

Description/Data:

Antimitotic chemotherapeutic which inhibits via reversible high-affinity binding to microtubules [1]. Induces apoptosis in a variety of cancer cell lines [2] however, tumor cells can quickly develop resistance to docetaxel via several mechanisms [3,4]. Can act in synergy with a variety of other anticancer agents including kinase inhibitors [5,6].

References:

- 1) Fabbri et al. (2008), Mitotic catastrophe and apoptosis induced by docetaxel in hormone-refractory prostate cancer cells; J. Cell Physiol, 217 494
- 2) Dosso and Berthold (2008), Docetaxel in the management of prostate cancer: current standard of care and future directions ; Expert Opin. Pharmacother, 9 1969
- 3) Homma et al. (2008), RPN2 gene confers docetaxel resistance in breast cancer; Nat. Med., 14 939
- 4) Kars et al. (2008), Reversal of Multidrug Resistance by Synthetic and Natural Compounds in Drug-Resistant MCF-7 Cell Lines Chemotherapy, 54 194
- 5) Wallin et al. (2012), GDC-0941, A Novel Class I Selective PI3K Inhibitor, Enhances the Efficacy of Docetaxel in Human Breast Cancer Models by Increasing Cell Death In vitro and In Vivo; Clin Cancer Res., May 14: Epub ahead of print.

FOR RESEARCH USE ONLY

NEUROMICS' REAGENTS ARE FOR IN VITRO AND CERTAIN NON-HUMAN IN VIVO EXPERIMENTAL USE ONLY AND NOT INTENDED FOR USE IN ANY HUMAN CLINICAL INVESTIGATION, DIAGNOSIS, PROGNOSIS, OR TREATMENT. THE ABOVE ANALYSES ARE MERELY TYPICAL GUIDES. THEY ARE NOT TO BE CONSTRUED AS BEING SPECIFICATIONS. ALL OF THE ABOVE INFORMATION IS, TO THE BEST OF OUR KNOWLEDGE, TRUE AND ACCURATE. HOWEVER, SINCE THE CONDITIONS OF USE ARE BEYOND OUR CONTROL, ALL RECOMMENDATIONS OR SUGGESTIONS ARE MADE WITHOUT GUARANTEE, EXPRESS OR IMPLIED, ON OUR PART. WE DISCLAIM ALL LIABILITY IN CONNECTION WITH THE USE OF THE INFORMATION CONTAINED HEREIN OR OTHERWISE, AND ALL SUCH RISKS ARE ASSUMED BY THE USER. WE FURTHER EXPRESSLY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.-V2/08/2012

6) Heinemann et al. (2011), Synergistic effects of oncolytic reovirus and docetaxel chemotherapy in prostate cancer; BMC Cancer, 11 221

FOR RESEARCH USE ONLY

NEUROMICS' REAGENTS ARE FOR IN VITRO AND CERTAIN NON-HUMAN IN VIVO EXPERIMENTAL USE ONLY AND NOT INTENDED FOR USE IN ANY HUMAN CLINICAL INVESTIGATION, DIAGNOSIS, PROGNOSIS, OR TREATMENT. THE ABOVE ANALYSES ARE MERELY TYPICAL GUIDES. THEY ARE NOT TO BE CONSTRUED AS BEING SPECIFICATIONS. ALL OF THE ABOVE INFORMATION IS, TO THE BEST OF OUR KNOWLEDGE, TRUE AND ACCURATE. HOWEVER, SINCE THE CONDITIONS OF USE ARE BEYOND OUR CONTROL, ALL RECOMMENDATIONS OR SUGGESTIONS ARE MADE WITHOUT GUARANTEE, EXPRESS OR IMPLIED, ON OUR PART. WE DISCLAIM ALL LIABILITY IN CONNECTION WITH THE USE OF THE INFORMATION CONTAINED HEREIN OR OTHERWISE, AND ALL SUCH RISKS ARE ASSUMED BY THE USER. WE FURTHER EXPRESSLY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.-V2/08/2012

www.neuromics.com

Neuromics Antibodies • 5325 West 74th Street, Suite 8 • Edina, MN 55439
phone 866-350-1500 • fax 612-677-3976 • e-mail: pshuster@neuromics.com