Product Datasheet

ITE (orb1225027)

Catalog Number	orb1225027
Category	Small Molecules
Description	A endogenous ligand, potent aryl hydrocarbon receptor (AhR) agonist in vitro; activates the murine AhR in vivo, but does not induce toxicity; induces the differentiation of stem-like cancer cells and reduces their tumorigenic potential in both subcutaneous and orthotopic xenograft tumour models.(In Vitro):ITE is an endogenous agonist of AhR, binding directly to AHR, with a Ki of 3 nM. ITE (0.03-30 mg/mL) decreases the antigen-specific T-cell proliferative responses. ITE potently inhibits human pulmonary artery endothelial (HPAECs) growth at 10 and 20 μM, but shows no effect at 0.01-5 μM. ITE does not affect cell cycle progress of HPAECs at 10 and 20 μM, or induce expression of cleaved caspase-3 protein in HPAECs at 20 μM. In addition, ITE (20 μM) elevates CYP1A1 and CYP1B1 mRNA levels and decreases the levels of AhR protein in HPAECs.(In Vivo):ITE (200 μg, i.p.) significantly suppresses the development of experimental autoimmune uveitis (EAU) in mice. ITE reduces the proportions of cells expressing IFN-γ, IL-17, or IL-10 in mice. ITE also suppresses the secretion of inflammatory cytokines by LN cells in mice.
Target	AhR
Purity	>98% (HPLC)
MW	286.3058
Target Areas	AhR
Solubility (25°C)	DMSO: ≥ 41 mg/mL
CAS Number	448906-42-1
Formula	$C_{14}H_{10}N_2O_3S$
SMILES	COC(=O)C1=CSC(=N1)C(=O)C2=CNC3=CC=CC=C32

Biorbyt Ltd.
7 Signet Court, Swann Road
Cambridge
CB5 8LA
United Kingdom
Email: info@biorbyt.com, support@biorbyt.com
Phone: +44 (0)1223 859353 | Fax: +1 (415) 651-8558

Biorbyt LLC
68 TW Alexander Drive
Research Triangle Park
Durham
NC 27713-2847
United States
Email: info@biorbyt.com, support@biorbyt.com
Phone: +1 (415) 906-5211 | Fax: +1 (415) 651-8558

Chemical Name	4-Thiazolecarboxylic acid, 2-(1H-indol-3-ylcarbonyl)-, methyl ester
Storage	Storage temperature: -20°C. Stability: ≥ 2 years
Note	For research use only
Expiration Date	12 months from date of receipt.

Biorbyt Ltd.
7 Signet Court, Swann Road
Cambridge
CB5 8LA
United Kingdom
Email: info@biorbyt.com, support@biorbyt.com
Phone: +44 (0)1223 859353 | Fax: +1 (415) 651-8558

Biorbyt LLC
68 TW Alexander Drive
Research Triangle Park
Durham
NC 27713-2847
United States
Email: info@biorbyt.com, support@biorbyt.com
Phone: +1 (415) 906-5211 | Fax: +1 (415) 651-8558