

Catalog # 10-4122 I-BET762

CAS# 1260907-17-2

(4S)- 6-(4-Chlorophenyl)-N-ethyl-8-methoxy-1-methyl-4H-[1,2,4]triazolo[4,3-a][1,4]benzodiazepine-4-acetamide; GSK525762
Lot # FBS2087

I-BET762 is a potent inhibitor of the BET family of bromodomains with no activity at bromodomains BAZ2B, SP140, ATAD2, CREBBO, and PCAF. 1,2 IC $_{50}$'s for H4Ac peptide displacement: BRD2 = 32.5nM, BRD3 = 42.4nM, BRD4 = 36.1nM. 1 It was able to suppress proinflammatory proteins by macrophage, block acute inflammation in mice 1 , and suppressed the inflammatory function of T cells 3 . Inhibition of BET bromodomains results in downregulation of Myc transcription, an important oncogene. 4

- 1) Nicodeme et al. (2010), Suppression of inflammation by a synthetic histone mimic; Nature 468 1119
- 2) Mirguet et al. (2013), Discovery of Epigenetic Regulator I-BET762: Lead Optimization to Afford a Clinical Candidate Inhibitor of the BET Bromodomains; J.Med.Chem., **56** 7501
- 3) Bandukwala *et al.* (2012), Selective inhibition of CD4+ T-cell cytokine production and autoimmunity by BET protein and c-Myc inhibitors; Proc.Natl.Acad.Sci.USA, **109** 14532
- 4) Delmore et al. (2011), BET Bromodomain as a Therapeutic Strategy to Target c-Myc; Cell 146 904

PHYSICAL DATA

Molecular Weight: 423.90

 $\begin{tabular}{lll} Molecular Formula: & $C_{22}H_{22}CIN_5O_2$ \\ Purity: & $>98\%$ by HPLC \\ \end{tabular}$

NMR: (Conforms)

Solubility: DMSO (>25 mg/ml); Ethanol (>25mg/mL)

Physical Description: Tan solid

Storage and Stability: Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in

DMSO or ethanol may be stored at -20°C for up to 3 months.

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