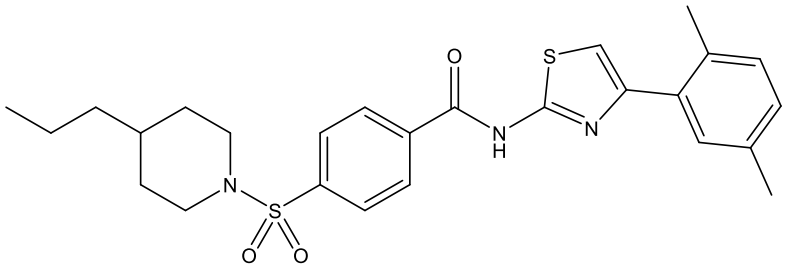
Catalog # 10-4145
2E151

CAS# 2416963-37-4
N-[4-(2,5-Dimethylphenyl)-1,3-thiazol-2-yl]-4-(4-propylpiperidin-1-yl)sulfonylbenzamide
Lot # FBA8230



Vaccine adjuvants are materials that enhance the magnitude and duration of protective immune responses, typically via pattern recognition receptors (PRR). 2E151 is a co-adjuvant that increases the potency of toll-like receptor (TLR) adjuvants and overall enhances T cell stimulation/proliferation and cytokine production.[1] Its increases intracellular Ca^{2+} *via* extracellular Ca^{2+} influx, leading to NF-kB activation (EC50 = 0.9 µM)[2] *via* IKK/MAPK phosphorylation and NFAT translocation in B cells and monocytes.

1) Saito, *et al.* (2022), *Small Molecule Calcium Channel Activator Potentiates Adjuvant Activity*; ACS Chem. Biol.**, 17** 217
2) Shukla, *et al.* (2021), *Structure-activity relationship studies in substituted sulfamoyl benzamidothiazoles that prolong NF-kB activation*; Bioorg. Med. Chem.**, 43** 116242

PHYSICAL DATA

Molecular Weight:	497.67
Molecular Formula:	$C_{26}H_{31}N_3O_3S_2$
Purity:	98% by HPLC
	NMR: Conforms
Solubility:	DMSO (at least 50 mg/ml)
Physical Appearance:	White solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase.
	Solutions in DMSO may be stored at -20°C for up to 3 months.

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