上海源叶生物科技有限公司
Shanghai yuanye Bio-Technology Co., Ltd
电话：021-61312973　　传真：021-55068248
网址：www.shyuanye.com
邮箱：shyysw@sina.com

产品名称：NS6180
产品别名：NS6180

生物活性：

Description

NS6180 is a novel potent and selective KCa3.1 channel inhibitor(IC50= 9 nM) prevents T-cell activation and inflammation. IC50 value: 9 nM [1] Target: KCa3.1 channel inhibitor in vitro: NS6180 inhibited cloned human KCa3.1 channels (IC50 = 9 nM) via T250 and V275, the same amino acid residues conferring sensitivity to triarylmethanes such as like TRAM-34. NS6180 inhibited endogenously expressed KCa3.1 channels in human, mouse and rat erythrocytes, with similar potencies (15–20 nM). NS6180 suppressed rat and mouse splenocyte proliferation at submicrolar concentrations and potently inhibited IL-2 and IFN-γ production, while exerting smaller effects on IL-4 and TNF-α and no effect on IL-17 production [1]. in vivo: DNBS challenged rats were treated with two doses (3 and 10 mg·kg-1 b.i.d.) of NS6180 for 7 days in direct comparison with the IBD drug sulfasalazine (300 mg·kg-1 q.d.). Both doses of NS6180 significantly improved weight gain and decreased inflammation induced swelling of the colon as determined by relative colon weight [1].

Solvent&Solubility

In Vitro:

DMSO : ≥ 47 mg/mL (145.36 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.0928 mL	15.4641 mL	30.9282 mL
	5 mM	0.6186 mL	3.0928 mL	6.1856 mL
	10 mM	0.3093 mL	1.5464 mL	3.0928 mL

*请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液；一旦配成溶液，请分装保存，避免反复冻融造成的产品失效。

储备液的保存方式和期限：-80°C, 6 months; -20°C, 1 month。-80°C 储存时，请在 6 个月内使用，-20°C 储存时，请在 1 个月内使用。

References

[1]. Strobak D, et al. NS6180, a new K(Ca) 3.1 channel inhibitor prevents T-cell activation and inflammation in a rat model of inflammatory bowel disease. Br J Pharmacol. 2013 Jan;168(2):432-44.

[2]. Jorgensen S, et al. A high-throughput screening campaign for detection of ca(2+)-activated k(+) channel activators and inhibitors using a fluorometric imaging plate reader-based tl(+)-influx assay. Assay Drug Dev Technol. 2013 Apr;11(3):163-72.