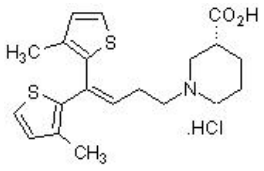
abcam

Product datasheet

Tiagabine hydrochloride, GAT-1 inhibitor ab120237

2 References 2 图像

概述

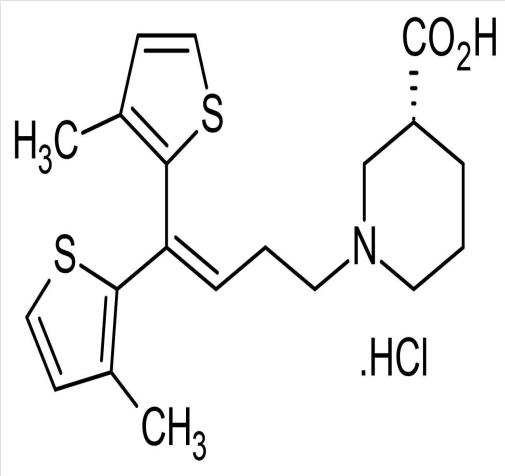
产品名称	Tiagabine hydrochloride，GAT-1抑制剂
描述	Selective GAT-1抑制剂
生物学描述	GABA uptake inhibitor, selective for GAT-1. Anticonvulsant *in vivo*. Also available in simple stock solutions (**ab146701**) - add 1 ml of water to get an exact, ready-to-use concentration.
纯度	> 99%
CAS编号	145821-59-6
化学结构	

性能

化学名称	(3*R*)-1-[4,4-Bis(3-methyl-2-thienyl)-3-buten-1-yl]-3-piperidinecarboxylic acid hydrochloride
分子量	412.00
分子式	$C_{20}H_{25}NO_2S_2$.HCl
PubChem识别号	91274
存放说明	Store at +4°C. Store under desiccating conditions. The product can be stored for up to 12 months.
溶解度概述	Soluble in water to 25 mM and in 1 eq. NaOH to 100 mM
处理	Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour. Need more advice on solubility, usage and handling? Please visit our **frequently asked questions (FAQ) page** for more details.
SMILES	Cl.Cc3ccsc3C(=CCCN1CCC[C@H](C1)C(=O)O)c2sccc2C

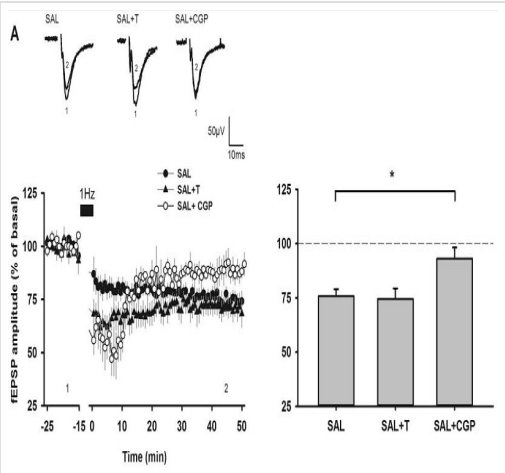
来源 Synthetic

图片



Chemical Structure - Tiagabine hydrochloride, GAT-1 inhibitor (ab120237)

2D chemical structure image of ab120237, Tiagabine hydrochloride, GAT-1 inhibitor



Functional Studies - Tiagabine hydrochloride, GAT-1 inhibitor (ab120237)

Rideau Batista Novais et al PLoS One. 2014 Sep 3;9(9):e106302. doi: 10.1371/journal.pone.0106302. eCollection 2014. Fig 4. Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/

Tiagabine restored LTD via the activation of $GABA_B$ receptors in LPS animals.

Tiagabine (20 μM) and/or CGP55845 (1 μM) were applied in the perfusate during both the recording of baseline activity and LFS (1 Hz stimulation, 15 min) delivery. **(Panel A)** Time-course and recapitulative graph depicting LTD induction in control (SAL) animals. LFS induced an LTD of fEPSP amplitude in control animals (SAL; filled circles; N=8), which was significantly blocked by the $GABA_B$ receptor antagonist CGP55845 (SAL+CGP; open circles; N=5; * $p<0.05$ vs SAL group). Tiagabine had no significant effect on LTD level (SAL+T; filled triangles; N=8).

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