abcam

Product datasheet

# Tiagabine hydrochloride, GAT-1 inhibitor ab120237

**2 References** 画像数 2

## 製品の概要

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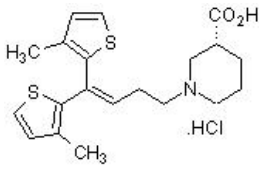
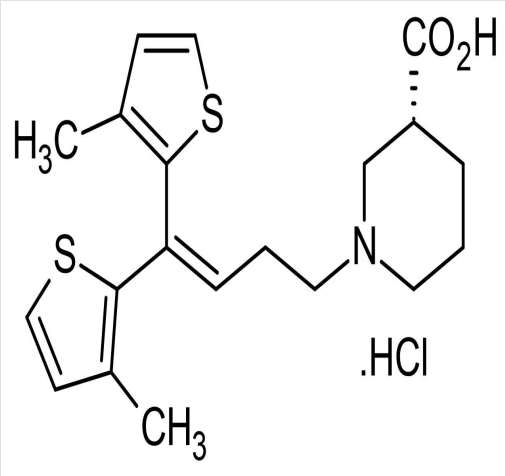
|---|---|
| **製品名** | Tiagabine hydrochloride, GAT-1 inhibitor |
| **製品の詳細** | Selective GAT-1 inhibitor |
| **生理活性の詳細** | GABA uptake inhibitor, selective for GAT-1. Anticonvulsant *in vivo*.<br><br>Also available in simple stock solutions (**ab146701**) - add 1 ml of water to get an exact, ready-to-use concentration. |
| **精製度** | > 99% |
| **CAS 番号** | 145821-59-6 |
| **構造式** |  |

## 製品の特性

| | |
|---|---|
| **体系名** | (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 登録番号** | 91274 |
| **保存方法** | Store at +4°C. Store under desiccating conditions. The product can be stored for up to 12 months. |
| **溶解性** | Soluble in water to 25 mM and in 1 eq. NaOH to 100 mM |
| **使用に関する注意** | 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.<br><br>Need more advice on solubility, usage and handling? Please visit our **frequently asked questions (FAQ) page** for more details. |
| **SMILES 線形表記** | Cl.Cc3ccsc3C(=CCCN1CCC[C@H](C1)C(=O)O)c2sccc2C |

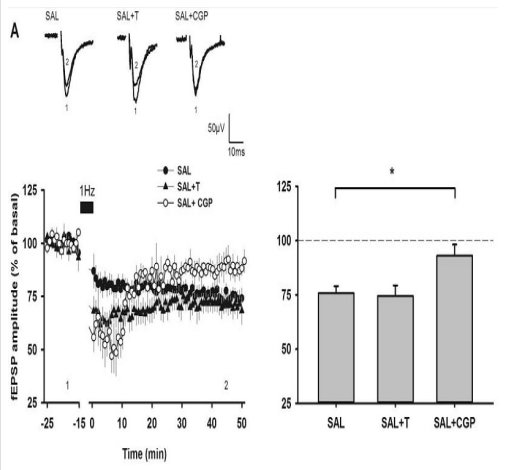
**由来** Synthetic

## 画像




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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