

**Product Name:** SB 205384

**Catalog No.:** 1512

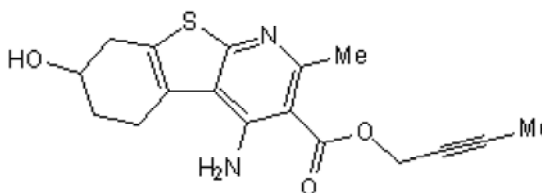
**Batch No.:** 1

CAS Number: 160296-13-9

IUPAC Name: 4-Amino-5,6,7,8-tetrahydro-7-hydroxy-2-methyl-[1*H*]benzothieno[2,3-*b*]pyridine-3-carboxylic acid 2-butynyl ester

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>17</sub>H<sub>18</sub>N<sub>2</sub>O<sub>3</sub>S  
**Batch Molecular Weight:** 330.4  
**Physical Appearance:** Off-white solid  
**Solubility:** DMSO to 50 mM  
 1eq. HCl to 100 mM  
**Storage:** Desiccate at RT  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.15 (Diethyl ether:Petroleum ether [8:2])  
**Melting Point:** Between 219 - 223°C  
**HPLC:** Shows 99.7% purity  
<sup>1</sup>H NMR: Consistent with structure  
<sup>13</sup>C NMR: Consistent with structure  
**Microanalysis:**

	Carbon Hydrogen Nitrogen		
Theoretical	61.8	5.49	8.48
Found	61.88	5.46	8.46

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Description:**

GABA<sub>A</sub> receptor modulator; slows current decay. Potentiates  $\alpha 6$ ,  $\alpha 3$  and  $\alpha 5$ -subunit-containing receptors ( $EC_{50}$  values are 280, 695 and 730 nM respectively). Displays little effect on receptors containing  $\alpha 1$  or  $\alpha 2$  subunits.

**Physical and Chemical Properties:**

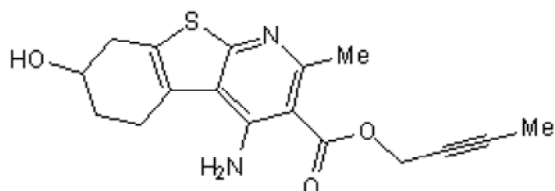
Batch Molecular Formula: C<sub>17</sub>H<sub>18</sub>N<sub>2</sub>O<sub>3</sub>S

Batch Molecular Weight: 330.4

Physical Appearance: Off-white solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Desiccate at RT

**Solubility & Usage Info:**

DMSO to 50 mM

1eq. HCl to 100 mM

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**

**Heidelberg et al** (2013) SB-205384 is a positive allosteric modulator of recombinant GABA<sub>A</sub> receptors containing rat  $\alpha 3$ ,  $\alpha 5$ , or  $\alpha 6$  subunit subtypes coexpressed with **347** 235. PMID: 23902941.

**Hutcheon et al** (2000) Developmental change in GABA<sub>A</sub> receptor desensitization kinetics and its role in synapse function in rat cortical neurons. *J.Physiol.* **522** 3. PMID: 10618148.

**Meadows et al** (1998) SB-205384: a GABA<sub>A</sub> receptor modulator with novel mechanism of action that shows subunit selectivity. *Br.J.Pharmacol.* **123** 1253. PMID: 9559912.

**Meadows et al** (1997) Effect of SB-205384 on the decay of GABA-activated chloride currents in granule cells cultured from rat cerebellum. *Br.J.Pharmacol.* **121** 1334. PMID: 9257911.

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