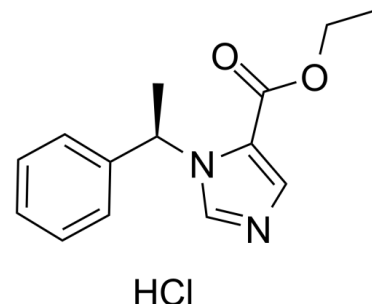


## Data Sheet

<b>Product Name:</b>	Etomidate (hydrochloride)
<b>Cat. No.:</b>	CS-1834
<b>CAS No.:</b>	53188-20-8
<b>Molecular Formula:</b>	C <sub>14</sub> H <sub>17</sub> ClN <sub>2</sub> O <sub>2</sub>
<b>Molecular Weight:</b>	280.75
<b>Target:</b>	GABA Receptor
<b>Pathway:</b>	Membrane Transporter/Ion Channel; Neuronal Signaling
<b>Solubility:</b>	H <sub>2</sub> O : ≥ 50 mg/mL (178.09 mM); DMSO : ≥ 100 mg/mL (356.19 mM)



### BIOLOGICAL ACTIVITY:

Etomidate HCl(R16659 HCl) is a GABAA receptors agonist, which is a short acting intravenous anaesthetic agent used for the induction of general anaesthesia. Target: GABA Receptor Etomidate is a potent inhibitor of the adrenal response to surgery. The absence of clinical consequences associated with the blunted response suggests that a major increase in adrenal hormone production may not be necessary during surgery [1]. Etomidate is an intravenous induction agent that is associated with hemodynamic stability during intubation. The agent is therefore attractive for use in critically ill patients who have a high risk of hemodynamic instability during this procedure [2]. Etomidate use was not associated with all cause 28-day mortality or hospital mortality but was associated with significantly higher ICU mortality (91% vs. 64% for etomidate and controls groups, respectively;  $p = 0.02$ ). Etomidate patients who received subsequent doses of hydrocortisone required lower doses of vasopressors and had more vasopressor-free days but no improvement in mortality [3]. Clinical indications: FDA Approved Date: 1983 Toxicity: Undesirable side effects of etomidate that may limit its use include pain on injection, myoclonus and adrenocortical suppression lasting 4-6 hours following an induction dose.

### References:

- [1]. Mehta, M.P., et al., Etomidate anesthesia inhibits the cortisol response to surgical stress. *Acta Anaesthesiol Scand*, 1985. 29(5): p. 486-9.
- [2]. Griesdale, D.E., Etomidate for intubation of patients who have sepsis or septic shock - where do we go from here? *Crit Care*, 2012. 16(6): p. 189.
- [3]. Cherfan, A.J., et al., Etomidate and mortality in cirrhotic patients with septic shock. *BMC Clin Pharmacol*, 2011. 11: p. 22.

### CAIndexNames:

1H-Imidazole-5-carboxylic acid, 1-[(1R)-1-phenylethyl]-, ethyl ester, hydrochloride (1:1)

### SMILES:

O=C(C1=CN=CN1[C@@H](C2=CC=CC=C2)C)OCC.Cl

**Caution: Product has not been fully validated for medical applications. For research use only.**

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