## **Product** Data Sheet

## **Detomidine**

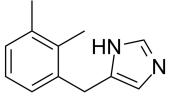
Cat. No.: HY-B0163 CAS No.: 76631-46-4 Molecular Formula:  $C_{12}H_{14}N_2$  Molecular Weight: 186.25

Target: Adrenergic Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.



## **BIOLOGICAL ACTIVITY**

Description	Detomidine, an imidazole derivative, is a potent $\alpha 2$ -adrenergic agonist. Detomidine produces dose-dependent analgesic effects <sup>[1][2]</sup> .
In Vitro	Currently, detomidine is only licenced for use in horses. $\alpha$ 2-adrenergic agonists produce dose-dependent analgesic effects, mediatated by activation of $\alpha$ 2 catecholamine receptors, thus inducing a negative feedback response, reducing production of excitatory neurotransmitters. Due to inhibition of the sympathetic nervous system, detomidine also has cardiac and respiratory effects and an antidiuretic action.  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **REFERENCES**

[1]. Virtanen R, et al. Pharmacological evidence for the involvement of alpha-2 adrenoceptors in the sedative effect of detomidine, a novel sedative-analgesic. J Vet Pharmacol Ther. 1985 Mar;8(1):30-7.

[2]. J Still, et al. Cardiovascular and respiratory effects of detomidine in isoflurane-anaesthetised horses. J S Afr Vet Assoc. 1996 Dec;67(4):199-203.

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

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