

Histamine receptors (version 2019.4) in the IUPHAR/BPS Guide to Pharmacology Database

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Abstract

Histamine receptors (**nomenclature as agreed by the NC-IUPHAR Subcommittee on Histamine Receptors [75, 163]**) are activated by the endogenous ligand **histamine**. Marked species differences exist between histamine receptor orthologues [75]. The human and rat H₃ receptor genes are subject to significant splice variance [12]. The potency order of histamine at histamine receptor subtypes is H₃ = H₄ > H₂ > H₁ [163]. Some agonists at the human H₃ receptor display significant ligand bias [171]. Antagonists of all 4 histamine receptors have clinical uses: H₁ antagonists for allergies (e.g. **cetirizine**), H₂ antagonists for acid-reflux diseases (e.g. **ranitidine**), H₃ antagonists for narcolepsy (e.g. **pitolisant/WAKIX**; Registered) and H₄ antagonists for atopic dermatitis (e.g. **ZPL-3893787**; Phase IIa) [163] and vestibular neuritis (AUV) (SENS-111 (Seliforant, previously UR-63325), entered and completed vestibular neuritis (AUV) Phase IIa efficacy and safety trials, respectively) [205, 8].

Contents

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Database links

Histamine receptors

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Receptors

H₁ receptor

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H₂ receptor

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H₃ receptor

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H₄ receptor

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=265>

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