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The histamine receptors are of 4 types: H₁R, H₂R, H₃R, H₄R

(1)

~~H₁R~~ H₁R (2)

~~H₂R~~

(3)

~~H₃R~~

(4) ~~H₄R~~

histamine receptors are metabotropic GPCR receptors.

They belong to G-protein coupled receptors

- H₁-R receptor drives cellular migration, nociception, vasodilation and bronchodilation.
- H₂-R receptor modifies gastric acid secretion, airway mucus production, and vascular permeability.
- The H₃-R receptor plays an important role in neuro-inflammatory diseases.
- Histamine H₄-R receptor is a pertussis toxin sensitive GPCR predominantly expressed on cells of immune system, including MCs, monocytes, eosinophils, dendritic cells, T cells and natural killer cells. It is expressed mainly on various immune cells.