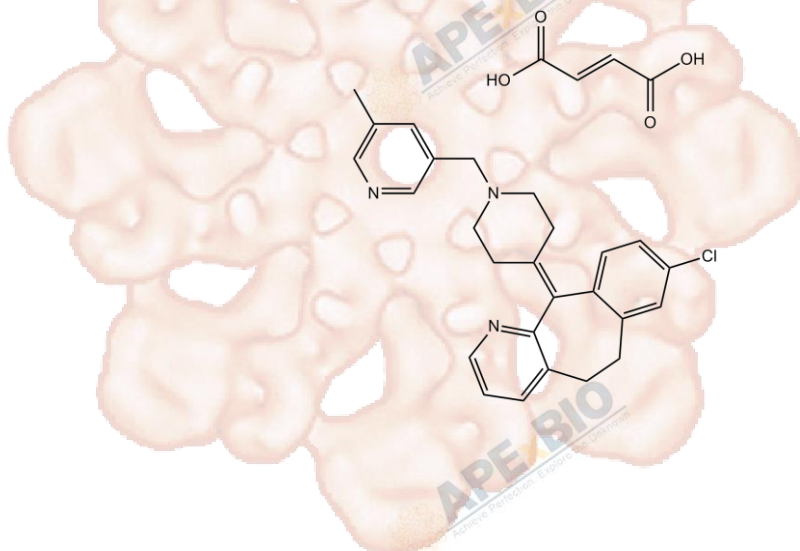


Product Data Sheet

Rupatadine Fumarate

| | |
|------------------|--|
| Cat. No.: | B1566 |
| CAS No.: | 182349-12-8 |
| Formula: | C ₂₆ H ₂₆ ClN ₃ ·C ₄ H ₄ O ₄ |
| M.Wt: | 532.03 |
| Synonyms: | |
| Target: | Neuroscience |
| Pathway: | Histamine Receptor |
| Storage: | Store at -20°C |



Solvent & Solubility

insoluble in H₂O; ≥11.75 mg/mL in DMSO; ≥12.55 mg/mL in EtOH with gentle warming

In Vitro

| Preparing Stock Solutions | Solvent | Mass Concentration | Mass | | |
|---------------------------|---------|--------------------|-----------|-----------|------------|
| | | | 1mg | 5mg | 10mg |
| | | 1 mM | 1.8796 mL | 9.3980 mL | 18.7959 mL |
| | | 5 mM | 0.3759 mL | 1.8796 mL | 3.7592 mL |
| | | 10 mM | 0.1880 mL | 0.9398 mL | 1.8796 mL |

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

Inhibitor of PAF and histamine (H₁) receptor

IC₅₀ & Target

In Vitro

Cell Viability Assay

| | |
|----------------------|---|
| Cell Line: | Platelets |
| Preparation method: | The solubility of this compound in warm ethanol is > 12.6 mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below - 20 °C for several months. |
| Reacting conditions: | Up to 100 μM; 5 mins |

| | | |
|---------|--------------------------|--|
| | Applications: | Rupatadine Fumarate competitively inhibited platelet-activating factor (PAF)-induced platelet aggregation in washed rabbit platelets ($pA_2 = 6.68 \pm 0.08$) and in human platelet-rich plasma ($IC_{50} = 0.68 \mu M$). However, Rupatadine Fumarate did not affect ADP- or arachidonic acid (AA)-induced platelet aggregation. |
| In Vivo | Animal experiment | |
| | Animal models: | Mice and rats |
| | Dosage form: | i.v. or p.o |
| | Applications: | Rupatadine Fumarate (i.v.) blocked histamine- and PAF-induced hypotension in rats with the ID_{50} values of 1.4 and 0.44 mg/kg, respectively. Moreover, Rupatadine Fumarate potently inhibited PAF-induced mortality in mice ($ID_{50} = 0.31$ and 3.0 mg/kg, respectively, for the i.v. and p.o. administrations) and endotoxin-induced mortality in mice and rats ($ID_{50} = 1.6$ and 0.66 mg/kg, respectively. i.v.). |
| | Other notes: | Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal. |

Product Citations

1. Bravo DD, Chernov-Rogan T, et al. "An impedance-based cell contraction assay using human primary smooth muscle cells and fibroblasts." J Pharmacol Toxicol Methods. 2017 Oct 19;89:47-53.PMID:29056519

See more customer validations on www.apexbt.com.

References

[1]. Merlos M, Giral M, Balsa D, Ferrando R, Queralt M, Puigdemont A, García-Rafanell J, Forn J. Rupatadine, a new potent, orally active dual antagonist of histamine and platelet-activating factor (PAF). J Pharmacol Exp Ther. 1997 Jan;280(1):114-21.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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