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Inhibitors, Agonists, Screening Libraries

Bombesin Receptor

Bombesin, a peptide of 14 amino acids, is an amphibian homolog to the mammalian gastrin-releasing peptide (GRP), that has been extensively studied as a targeting ligand for diagnosis and therapy of GRP positive tumors, such as breast, pancreas, lungs and prostate cancers. Bombesin binds to and activates G-protein coupled receptors, known as gastrin releasing peptide receptor (GRPR).

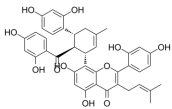
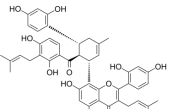
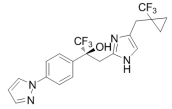
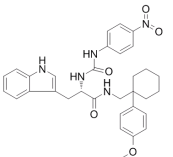
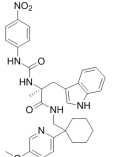
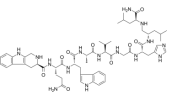
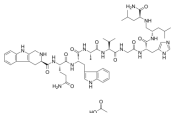
Bombesin, a tetradecapeptide isolated from the skin of the frog *Bombina bombina*, have shown broad spectrum of biological activities. The BBS activates three G protein-coupled receptors: bombesin receptor 1 (BB₁), bombesin receptor 2 (BB₂), and bombesin receptor 3 (BB₃). BBS-like peptides-Neuromedin B (NB) and gastrin releasing peptide (GRP) are natural ligand of the BB₁ and BB₂ receptors, respectively.

In mammals, BBS receptors and BBS-like peptides are distributed in the Central Nervous System (CNS) including regions involved in the cardiorespiratory control.

The mammalian bombesin G-protein-coupled receptor subfamily comprises three structurally related members, the receptors for neuromedin B (NMBR or BB₁), gastrin-releasing peptide (GRPR or BB₂), and bombesin receptor subtype-3 (BRS-3 or BB₃).

Bombesin receptor subtype-3 (BRS-3) is an orphan G protein-coupled receptor implicated in the regulation of energy homeostasis.

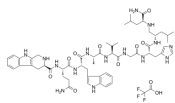
Bombesin Receptor Agonists, Antagonists & Modulators

<p>BA 1</p> <p>Cat. No.: HY-P1423</p> <p>BA 1 is a potent bombesin receptor agonist (IC_{50} values are 0.26, 1.55 and 2.52 nM for BB₁, BB₂ and BB₃ respectively). BA 1 enhances glucose transport in obese and diabetic primary myocytes. BA 1 also stimulates NCI-H1299 lung cancer cell proliferation in vitro.</p> <p>Purity: >98%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 1 mg, 5 mg</p> <p>YQWAV(Bal)HF(Nle)-NH₂</p>	<p>BA 1 TFA</p> <p>Cat. No.: HY-P1423A</p> <p>BA 1 TFA is a potent bombesin receptor agonist (IC_{50} values are 0.26, 1.55 and 2.52 nM for BB₁, BB₂ and BB₃ respectively). BA 1 TFA enhances glucose transport in obese and diabetic primary myocytes. BA 1 TFA also stimulates NCI-H1299 lung cancer cell proliferation in vitro.</p> <p>Purity: >98%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 1 mg, 5 mg</p> <p>YQWAV(Bal)HF(Nle)-NH₂ (TFA salt)</p>
<p>Bombesin</p> <p>Cat. No.: HY-P0195</p> <p>Bombesin is a tetradecapeptide originally isolated from frog skin; plays an important role in the release of gastrin and the activation of G-protein receptors.</p> <p>(Glp)-RLGNQWAVGHLM-NH₂</p> <p>Purity: 99.69%</p> <p>Clinical Data: Phase 2</p> <p>Size: 1 mg, 5 mg, 10 mg, 25 mg</p>	<p>Kuwanon G</p> <p>Cat. No.: HY-N4247</p> <p>Kuwanon G is a flavonoid isolated from <i>Morus alba</i>, acts as a bombesin receptor antagonist, with potential antimicrobial activity.</p>  <p>Purity: >98%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 5 mg, 10 mg, 20 mg</p>
<p>Kuwanon H</p> <p>Cat. No.: HY-N2600</p> <p>Kuwanon H is a flavonoid isolated from <i>Morus bombycis</i>, which acts as a potent non-peptide bombesin receptor antagonist. Kuwanon H selectively inhibits binding of gastrin releasing peptide CRP to GRP-prefering receptor, with a K_i value of 290 nM in cells.</p>  <p>Purity: >98%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 1 mg, 5 mg</p>	<p>MK-5046</p> <p>Cat. No.: HY-14342</p> <p>MK-5046 is a novel BRS-3 agonist, binds to BRS-3 with high affinity (mouse K_i = 1.6 nM, human K_i = 25 nM).</p>  <p>Purity: 99.67%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg</p>
<p>ML-18</p> <p>Cat. No.: HY-101844</p> <p>ML-18 is a non-peptide bombesin receptor subtype-3 (BRS-3) antagonist with an IC_{50} of 4.8 μM.</p>  <p>Purity: 98.84%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg</p>	<p>PD176252</p> <p>Cat. No.: HY-103286</p> <p>PD176252 is a potent antagonist of neuromedin-B preferring (BB₁) and gastrin-releasing peptide preferring (BB₂) receptor with K_s of 0.17 nM and 1 nM for human BB₁ and BB₂ receptors, and 0.66 nM, 16 nM for Rat BB₁ and BB₂ receptors, respectively; PD176252 is also...</p>  <p>Purity: >99.0%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 1 mg, 5 mg</p>
<p>RC-3095</p> <p>Cat. No.: HY-P0107</p> <p>RC-3095 is a bombesin/gastrin releasing peptide receptor (GRPR) antagonist. RC-3095 exerts protective effects by reducing gastric oxidative injury in the arthritic mice.</p>  <p>Purity: >98%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 1 mg, 5 mg</p>	<p>RC-3095 acetate</p> <p>Cat. No.: HY-P0107B</p> <p>RC-3095 acetate is a bombesin/gastrin releasing peptide receptor (GRPR) antagonist. RC-3095 acetate exerts protective effects by reducing gastric oxidative injury in the arthritic mice.</p>  <p>Purity: >98%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 1 mg, 5 mg</p>

RC-3095 TFA

Cat. No.: HY-P0107A

RC-3095 TFA is a **bombesin/gastrin** releasing peptide receptor (**GRPR**) antagonist. RC-3095 TFA exerts protective effects by reducing gastric oxidative injury in the arthritic mice.



Purity: >98%

Clinical Data: No Development Reported

Size: 1 mg, 5 mg