

# **Bombesin Receptor**

The bombesin (Bn) receptor family includes the gastrin-releasing peptide (GRPR) and neuromedin B (NMBR) receptors, Bn receptor subtype 3 (BRS-3) and Bn receptor subtype 4 (BB<sub>4</sub>). Activation of these receptors mediates a wide spectrum of biological activities including important changes in the central nervous system including satiety, control of circadian rhythm, thermoregulation, and in peripheral tissues including stimulation of gastrointestinal hormone release, activation of macrophages, and effects on development. Bn-related peptides also have potent growth effects causing proliferation of bothnormal cells and various tumor cell lines.

BRS-3 is receiving increased attention, because not only is it important in a number of gastrointestinal (GI) tract and central nervous system (CNS) processes, but also because it is one of the G-protein coupling receptor families most frequently ectopically or overexpressed by a different tumors, including prostate cancer, small cell lung cancer, breast cancer, CNS tumors, and carcinoids (intestinal, thymic, and bronchial).

## Bombesin Receptor Agonists, Antagonists & Modulators

BA 1		BA 1 TFA	
	Cat. No.: HY-P1423		Cat. No.: HY-P1423A
BA 1 is a potent agonist for the <b>bombesin</b> (BB) family of receptors. BA 1 binds with high affinity to Bombesin receptor subtype-3 (BRS3), gastrin releasing peptide receptor (GRPR), neuromedin B receptor (NMBR) with $IC_{so}$ s of 6, 0.4, 2.5 nM. Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg	YQWAV{Bal}HF{Nie}-NH <sub>2</sub>	BA 1 TFA is a potent agonist for the <b>bombesin</b> (BB) family of receptors. BA1 binds with high affinity to Bombesin receptor subtype-3 ( <b>BRS3</b> ), gastrin releasing peptide receptor ( <b>GRPR</b> ), neuromedin B receptor ( <b>NMBR</b> ) with <b>IC</b> <sub>50</sub> s of 6, 0.4, 2.5 nM. <b>Purity:</b> 99.65% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 5 mg	YQWAV(Bai)HF(Nie)-NH <sub>2</sub> (TFA sait)
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BIM-26226	<b>Cat. No.:</b> HY-P0039	Bombesin	Cat. No.: HY-P0195
BIM-26226, gastrin-releasing peptide, is a potent and selective antagonist of <b>bombesin receptor</b> .         BIM-26226 inhibits BN- or GRP-stimulated amylase release with IC <sub>50</sub> s in the nanomolar range.         BIM-26226 can be used for the research of cancer.         Purity:       >98%	ŴŗŗĊĸŗŗĸĊţ	Bombesin, a tetradecapeptide, plays an important role in the release of gastrin and the activation of G-protein receptors. Purity: 99.76%	{Gip}-RLGNQWAVGHLM-NH2
Clinical Data: No Development Reported Size: 1 mg, 5 mg		Clinical Data:         No Development Reported           Size:         1 mg, 5 mg, 10 mg, 25 mg	
Kuwanon G	Cat. No.: HY-N4247	Kuwanon H	Cat. No.: HY-N2600
Kuwanon G is a flavonoid isolated from Morus alba, acts as a <b>bombesin receptor</b> antagonist, with potential antimicrobial activity.	HO, OH HO, HO, OH HO, HO, OH HO, HO, OH	Kuwanon H is a flavonoid isolated from Morus bombycis, which acts as a potent non-peptide <b>bombesin receptor</b> antagonist. Kuwanon H selectively inhibits binding of gastrin releasing peptide CRP to <b>GRP-preferring recepotr</b> , with a <b>K</b> <sub>i</sub> value of 290 nM in cells.	
Purity:     ≥95.0%       Clinical Data:     No Development Reported       Size:     5 mg		Purity:98.60%Clinical Data:No Development ReportedSize:1 mg	óн ö <sup>I</sup>
Litorin		MK-5046	
	Cat. No.: HY-103281		Cat. No.: HY-14342
Litorin, an amphibian bombesin peptide derivative, is an <b>bombesin receptor</b> agonist. Litorin stimulates the contraction of smooth muscle, stimulates gastrin, gastric acid, and pancreatic secretion, and suppresses the nutriment in vivo.	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	MK-5046 is a novel BRS-3 agonist, binds to BRS-3 with high affinity (mouse Ki = 1.6 nM, human Ki = 25 nM).	
Purity:99.13%Clinical Data:No Development ReportedSize:1 mg, 5 mg, 10 mg		Purity:99.67%Clinical Data:No Development ReportedSize:10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg	∖≂N
ML-18		PD 168368	
	Cat. No.: HY-101844		Cat. No.: HY-116216
ML-18 is a non-peptide bombesin receptor subtype-3 (BRS-3) antagonist with an IC $_{\rm 50}$ of 4.8 $\mu M.$		PD 168368 is a potent, competitive, and selective <b>neuromedin B receptor</b> (NMB-R) antagonist with the K <sub>i</sub> of 15–45 nM. PD 168368 is neuromedin B receptor (NMBR; IC <sub>50</sub> =96 nM) / gastrin-releasing peptide receptor (GRPR IC <sub>50</sub> =3500 nM) antagonist.	
Purity:       98.84%         Clinical Data:       No Development Reported         Size:       10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 1	o <sup>™</sup>	Purity:     ≥97.0%       Clinical Data:     No Development Reported       Size:     1 mg, 5 mg	5

# PD176252Cat. No.: HY-103286PD176252 is a potent antagonist of neuromedin-B<br/>preferring (BB1) and gastrin-releasing<br/>peptide-preferring (BB2) receptor with K1s of<br/>0.17 nM and 1 nM for human BB1 and BB2<br/>receptors, respectively; PD176252 is also...Purity:98.17%<br/>Clinical Data:Purity:98.17%<br/>Size:Clinical Data:No Development Reported<br/>Size:Size:10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

### RC-3095 TFA

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

Purity:	97.18%		
<b>Clinical Data:</b>	No Development Reported		
Size:	1 mg, 5 mg, 10 mg		

## RC-3095

Cat. No.: HY-P0107A

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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.

 Purity:
 >98%

 Clinical Data:
 No Development Reported

 Size:
 1 mg, 5 mg

Cat. No.: HY-P0107