# PathHunter<sup>™</sup> β-Arrestin Assays: Determination of Pharmacology Differences Between Human and Ortholog GPCRs

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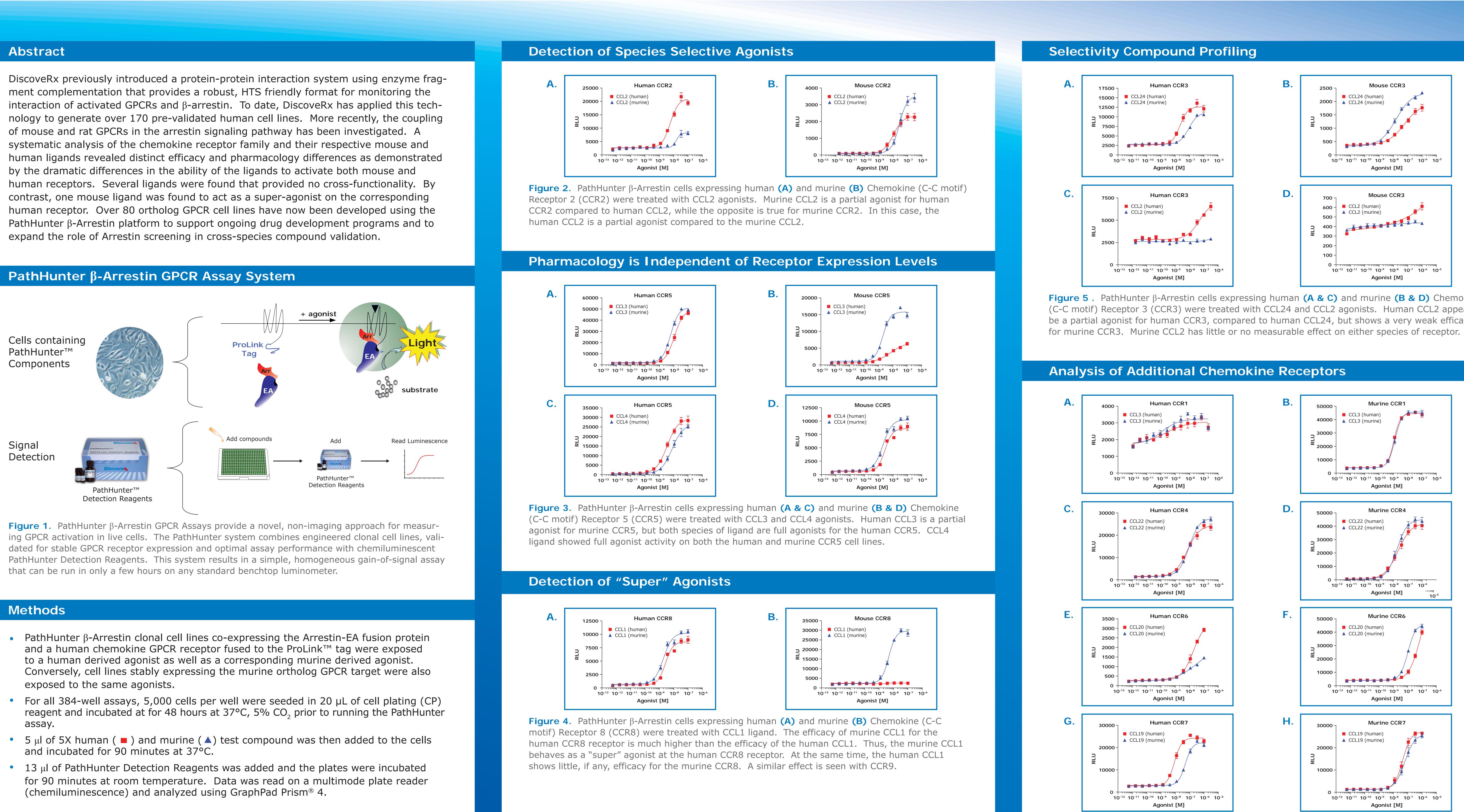
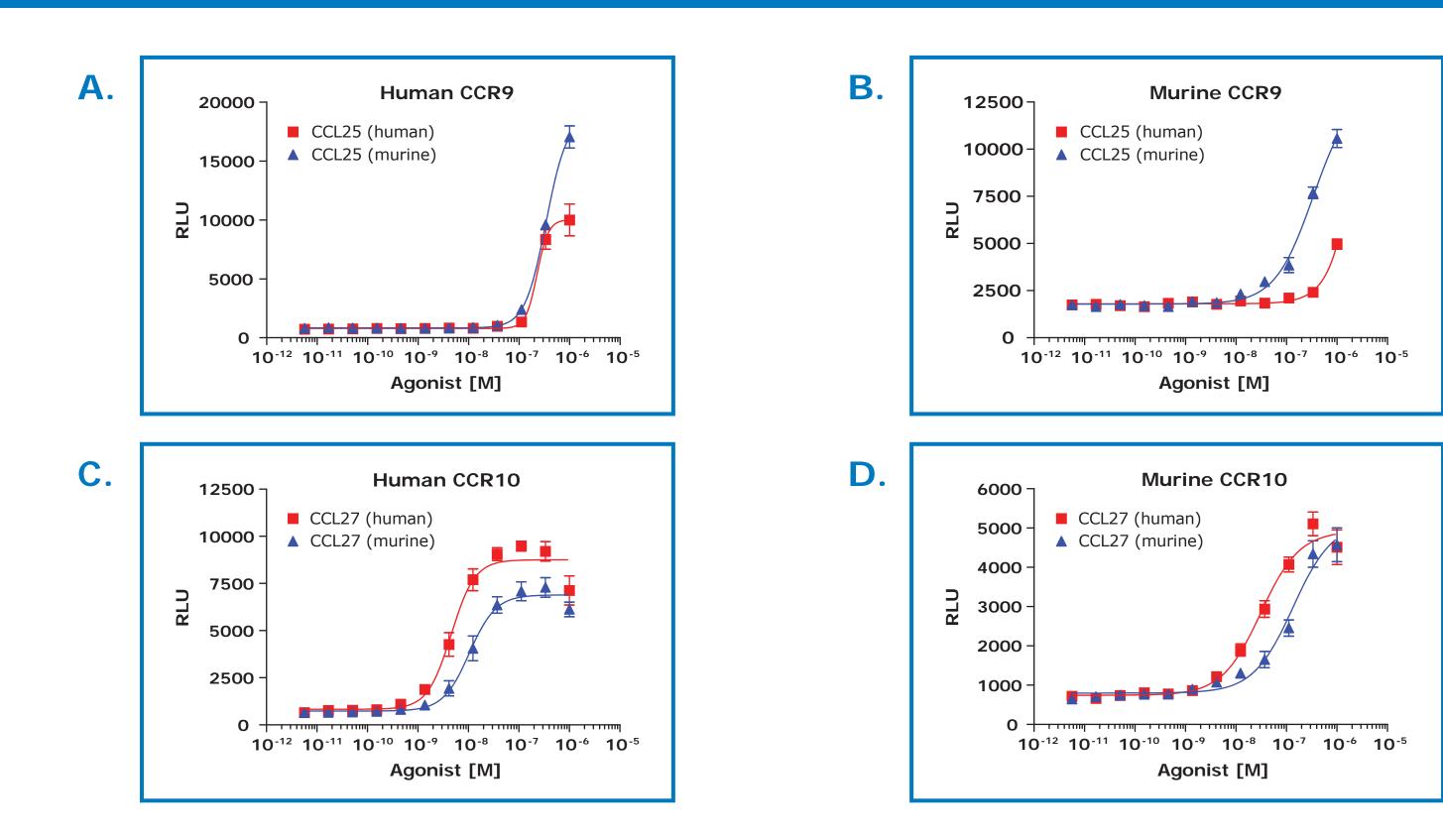


Figure 5. PathHunter β-Arrestin cells expressing human (A & C) and murine (B & D) Chemokine (C-C motif) Receptor 3 (CCR3) were treated with CCL24 and CCL2 agonists. Human CCL2 appears to be a partial agonist for human CCR3, compared to human CCL24, but shows a very weak efficacy





### Ortholog PathHunter Cell Lines

GPCR Family	GPCR Target	Coupling Status	GPCR Family	GPCR Target	Coupling Status	GPCR Family	GPCR Target	Coupling Status
Adenosine	mADORA2B	Gs	Class A Orphan	mGPR1		Neuropeptide Y	mNPY1R	Gi
Adenosine	mADORA3	Gi	Corticotropin	mCRHR1	Gs	Neuropeptide Y	mNPY2R	Gi & Gq
Adrenoreceptor	mADRA1B	Gq	Dopamine	mDRD5	Gs	Opioid	mOPRD1	Gi
Anaphylotoxin	mC5AR1	Gi	Dopamine	rDRD1	Gi	Opioid	mOPRK1	Gi
Apelin	mAGTRL1	Gi	Dopamine	mDRD5	Gs	Opioid	mOPRM1	Gi
Bombesin	mBRS3	Gq	Dopamine	rDRD5	Gs	Opioid	rOPRM1	Gi
Cannabinoid	mCNR1	Gi	Endothelin	mEDNRA	Gq	Orexin	mHCRTR1	Gq
Cannabinoid	mCNR2	Gi	Endothelin	mEDNRB	Gi, Gq, & Gs	P2Y	mP2RY12	Gi
Chemokine	mCCR1	Gi	Formylpeptide	mFPR1	Gq	Platelet-Activating	mPTAFR	Gi & Gq
Chemokine	mCCR2	Gi	Galanin	mGALR1	Gi	Prokineticin	rPROKR1	Gq & Gs
Chemokine	mCCR3	Gi	Galanin	mGALR2	Gi & Gq	Prokineticin	rPROKR2	Gi & Gq
Chemokine	mCCR4	Gi	Ghrelin	mGHSR1a	Gq	Prostanoid	mCRTH2 (mGPR44)	Gi
Chemokine	mCCR5	Gi	Glucagon	mGCGR	Gs	Prostanoid	rCRTH2 (rGPR44)	Gi
Chemokine	mCCR6	Gi	Glucagon	mGLP1R	Gs	Prostanoid	mPTGIR	Gs
Chemokine	mCCR7	Gi	KISS1-Derived	mKISS1R	Gq	Serotonin	mHTR2A	Gi
Chemokine	mCCR8	Gi	Leukotriene	mLTB4R	Gi & Gq	Somatostatin	mSSTR2	Gi
Chemokine	mCCR9	Gi	Lysophospholipid	mEDG1	Gi	Somatostatin	mSSTR3	Gi
Chemokine	mCCR10	Gi	Lysophospholipid	cEDG5	Gs	Somatostatin	mSSTR5	Gi
Chemokine	mCMKLR1	Gi	Lysophospholipid	mEDG5 (pool)	Gs	Succinate Receptor	cSUCNR1	
Chemokine	mIL8RB (CXCR2)	Gi	Lysophospholipid	rEDG5	Gs	Tachykinin	mTACR1	Gs & Gq
Chemokine	mCX3CR1	Gi	Lysophospholipid	sEDG5	Gs	Urotensin	mUTSR2	Gq
Chemokine	mCXCR3	Gi	Lysophospholipid	mEDG6	Gi	Vasopressin &	mAVPR2	Gs
Chemokine	mCXCR4	Gi	Melanin	mMCHR1	Gi	Vasopressin &	mOXTR	Gi & Gq
Chemokine	mCXCR5	Gi	Melanocortin	mMC3R	Gs	VIP & PACAP	mADCYAP1R1	Gs & Gq
Chemokine	mCXCR6	Gi	Melanocortin	mMC4R	Gs	VIP & PACAP	mVIPR1	Gs
Cholecystokinin	mCCKAR	Gq	Melanocortin	mMC5R	Gs			

**Note:** m = mouse; c = canine; r = rat

# **Contact Information**

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