

in vitro ADMET & pharmacology



**XENOTECH**  
A BioIVT Company

RRA Portfolio

# Radio-Receptor Assay Portfolio

2022

Binding Assay System	Subtype	System
Adenosine	A1	Rat brain
	A2	Rat striatum
	Transporter	Guinea pig brain
	A1	Human
	A2a	Human
	A2b	Human
	A3	Human
Adrenergic	$\alpha$ 1 (Non-Selective)	Rat brain
	$\alpha$ 1A	Rat salivary glands
	$\alpha$ 1B	Rat liver
	$\alpha$ 2 (Non-Selective)	Rat cerebral cortex
	$\beta$ (Non-Selective)	Rat brain
	$\beta$ 1	Rat cerebral cortex
	$\beta$ 2	Rat lung
	$\alpha$ 1A	Human
	$\alpha$ 1B	Human
	$\alpha$ 2A	Human
	$\alpha$ 2B	Human
	$\beta$ 1	Human
	$\beta$ 2	Human
	$\beta$ 3	Human
Adrenomedulin	CRLR+RAMP3	Human
Androgen	AR	Rat prostate
	AR	Rat recombinant
Angiotensin	AT1	Human
	AT2	Human
Apelin	APJ	Human
Bradykinin	B1	Human
	B2	Human
Bombesin	BR (Non-Selective)	Rat brain
	BB1	Human
	BB2	Human
	BB3	Human
Calcitonin	CALR	Rat brain
Ca channel	Type L , Benzothiazepine	Rat cerebral cortex
	Type L , Dihydropyridine	Rat cerebral cortex
	Type L , Phenylalkylamine	Rat cerebral cortex
	Type N	Rat brain
Cannabinoid	CB1	Human

Binding Assay System	Subtype	System
	CB2	Human
<b>CGRP</b>	CRLR+RAMP1	Human
<b>Chemoattractant</b>	C3a	Human
<b>Chemokine</b>	CXCR1	Human
	CXCR2	Human
	CXCR3	Human
	CXCR4	Human
	CXCR6	Human
	CX3CR1	Human
	CCR1	Human
	CCR2b	Human
	CCR6	Human
<b>CCK</b>	A	Human
	B	Human
<b>CRF</b>	CRF1	Human
	CRF2	Human
<b>Dopamine</b>	D1	Rat striatum
	D2	Rat striatum
	D1	Human
	D2 short	Human
	D2 long	Human
	D3	Human
	D5	Human
	Transporter	Human
<b>EGF</b>	EGF	Human
<b>Estrogen</b>		Rat uterus
	$\alpha$	Human
	$\beta$	Human
<b>Endothelin</b>	ETA	Human
	ETB	Human
<b>GABA</b>	GABA A (Agonist Site)	Rat cerebellum
	GABA A (BZ Central)	Rat brain
	GABA A (BZ Peripheral)	Rat heart
	GABA A (Chloride Channel)	Rat cerebral cortex
	GABA B	Rat cerebellum
	Transporter	Rat cerebral cortex
	GABA B1a	Human
	GABA B1b	Human
	GABA B1b + R2	Human

Binding Assay System	Subtype	System
Galanin	GalR1	Human
	GalR2	Human
Glucagon	GIP	Human
	GLP-1	Human
	glucagon	Human
Glucocorticoid		Rat liver
		Human
Glutamate	Non-Selective	Rat cerebral cortex
	AMPA	Rat cerebral cortex
	Kainate	Rat brain
	NMDA (Agonist site)	Rat cerebral cortex
	NMDA (Glycine site)	Rat cerebral cortex
	NMDA (Phencyclidine site)	Rat cerebral cortex
	NMDA (Polyamine site)	Rat cerebral cortex
Glycine	Strychnine sensitive	Rat spinal cord
Histamine	H1 (Central)	Guinea pig cerebellum
	H1 (Peripheral)	Guinea pig lung
	H2	Rat cerebral cortex
	H3	Rat brain
	H1	Human
	H2	Human
	H3	Human
Imidazoline	Central	Rat cerebral cortex
	Peripheral	Rat kidney
IP3		Rat cerebellum
Insulin		Rat liver
K channel	KA	Rat cerebral cortex
	KATP	Rat brain
K channel	Kv	Rat brain
	SKCa	Rat brain
	hERG	Human
Melanin-Concentration Hormone	MCH1	Human
Melanocortin	MC3	Human
	MC4	Human
	MC5	Human
Melatonin	MT1	Human
Monoamine	Transporter	Rabbit platelet
Muscarinic	Non-Selective	Rat cerebral cortex
	M1	Rat cerebral cortex

Binding Assay System	Subtype	System
	M2	Rat cerebral cortex
	M1	Human
	M2	Human
	M3	Human
	M4	Human
	M5	Human
Na channel		Rat brain
N-Formyl Peptide	FPRL1	Human
Neurokinin	NK1	Human
	NK2	Human
Neuromedin U	NMU1	Human
	NMU2	Human
Neuropeptide FF	NPFF1	Human
	NPFF2	Human
Neuropeptide Y	NPY2	Human
Neurotensin	NT1	Human
Norepinephrine	Transporter	Human
Nicotinic	Neuronal	Rat cerebral cortex
Orexin	OX1	Human
Opiate	Non-Selective	Rat cerebral cortex
	$\delta$	Guinea pig brain
	$\kappa$	Guinea pig brain
	$\mu$	Guinea pig brain
	$\delta$	Human
	$\kappa$	Human
	$\mu$	Human
	ORL1	Human
Oxytocin		Rat uterus
		Human
PAF		Rabbit platelet
PTH	PTH1	Human
Progesterone	Non-Selective	Rabbit uterus
	PR-B	Human
Prolactin Releasing Peptide	PrRP	Human
Prokineticin	PK1	Human
	PK2	Human
Prostanoid	CRTH2	Human
	DP	Human
	EP1	Human

Binding Assay System	Subtype	System
	EP2	Human
	EP3	Human
	EP4	Human
<b>Serotonin</b>	5HT1 (Non-Selective)	Rat striatum
	5HT1A	Rat cerebral cortex
<b>Serotonin</b>	5HT1B	Rat brain
	5HT2A	Rat cerebral cortex
	5HT4	Guinea pig striatum
	5HT1A	Human
	5HT1B	Human
	5HT2A	Human
	5HT2B	Human
	5HT2C (non-edited)	Human
	5HT3	Human
	5HT5A	Human
	5HT6	Human
	5HT7	Human
	Transporter	Human
<b>Sigma</b>	Non-Selective	Guinea pig brain
	$\sigma$ 1	Guinea pig brain
	$\sigma$ 2	Guinea pig brain
<b>Somatostatin</b>	SST1	Human
	SST2	Human
	SST3	Human
	SST4	Human
	SST5	Human
<b>Substance P</b>		Guinea pig submaxillary
<b>TRH</b>	TRH1	Human
<b>Thyroid hormone</b>	TH	Rat liver
<b>Vasopressin</b>	V1	Rat liver
	V2	Rat kidney
	V1A	Human
	V1B	Human
	V2	Human
<b>Vasoactive intestinal polypeptide</b>	VIP	Human

# Radio-Receptor Assay Packages

## Exploratory Screening Packages

### *Pick 10*

Select 10 Receptors (some exclusions may apply)

#### ***Detailed Profiling Package (Plan 1)***

20 Basic Exploratory Receptors

40 Intermediate Exploratory Receptors

#### ***Exhaustive Profiling Package (Plan 2)***

20 Basic Exploratory Receptors

40 Intermediate Exploratory Receptors

30 Advanced Exploratory Receptors

## Secondary Pharmacological Packages

#### ***Secondary Pharmacological Package (Plan 3)***

60 Pharmacologically-Relevant Receptors

#### ***Safety Pharmacological Packages***

Includes binding, kinase and enzyme assays

50 Receptors **(Plan 4)**

70 Receptors **(Plan 5)**

All assays are performed in duplicate format with one concentration per compound.

## Radio-Receptor Assay Packages

*Plan 1 - Detailed Profiling Package*

*Plan 2 - Exhaustive Profiling Package*

*Plan 3 - Secondary Pharmacological Package*

*Plan 4 & 5 - Safety Pharmacological Packages*

Assay System	Subtype	System	1	2	3	4	5
Adenosine	A1	Human	✓	✓	✓	✓	✓
	A2a	Human	✓	✓	✓	✓	✓
	A3	Human		✓			
	Transporter	Guinea pig		✓			
Adrenergic	α1A	Rat	✓	✓	✓		
	α1B	Rat		✓	✓		
	α1A	Human				✓	✓
	α2A	Human	✓	✓	✓	✓	✓
	α2B	Human	✓	✓	✓		✓
	β1	Human	✓	✓	✓	✓	✓
	β2	Human	✓	✓	✓	✓	✓
Androgen AR		Rat	✓	✓	✓	✓	✓
Angiotensin	AT1	Human	✓	✓	✓	✓	✓
	AT2	Human		✓	✓	✓	✓
Bradykinin	B1	Human	✓	✓			✓
	B2	Human	✓	✓	✓		✓
Bombesin	Non-Selective	Rat		✓			
Ca channel	L (Benzothiazepine)	Rat	✓	✓		✓	✓
	L (Dihydropyridine)	Rat	✓	✓	✓	✓	✓
	L (Phenylalkylamine)	Rat		✓		✓	✓
	Type N	Rat	✓	✓	✓		✓
Cannabinoid	CB1	Human	✓	✓	✓	✓	✓
	CB2	Human	✓	✓	✓	✓	✓
CCK	A	Human	✓	✓		✓	✓
	B	Human		✓			
CRF	CRF1	Human		✓	✓		
Dopamine	D1	Human	✓	✓	✓	✓	✓
	D2 short	Human	✓	✓	✓		
	D2 long	Human				✓	✓
	D3	Human	✓	✓			
	D5	Human		✓			
	Transporter	Human	✓	✓	✓	✓	✓
Estrogen		Rat	✓	✓	✓		✓
Endothelin	ETA	Human	✓	✓	✓	✓	✓
	ETB	Human	✓	✓	✓		
GABA	GABA A (Agonist)	Rat	✓	✓	✓	✓	✓
	GABA A (BZ Central)	Rat	✓	✓	✓	✓	✓
	GABA A (Chloride)	Rat		✓			
	GABA B	Rat	✓	✓	✓		
	Transporter	Rat	✓	✓			
Glucocorticoid		Human	✓	✓		✓	✓
Glutamate	AMPA	Rat		✓	✓		
	Kainate	Rat	✓	✓	✓		
	NMDA (Agonist)	Rat	✓	✓	✓	✓	✓
	NMDA (Glycine)	Rat	✓	✓	✓	✓	✓
	NMDA (Phencyclidine)	Rat	✓	✓	✓	✓	✓
	NMDA (Polyamine)	Rat		✓	✓		✓
Glycine	Strychnine sensitive	Rat		✓	✓		✓

Assay System	Subtype	System	1	2	3	4	5
Histamine	H1	Human	✓	✓	✓	✓	✓
	H2	Human	✓	✓	✓	✓	✓
	H3	Human	✓	✓	✓		
Imidazoline	Central	Rat	✓	✓			
IP3		Rat		✓			
K channel	KA	Rat		✓			
	KATP	Rat	✓	✓	✓	✓	✓
	Skca	Rat	✓	✓	✓	✓	✓
	hERG	Rat				✓	✓
Melatonin	MT1	Human	✓	✓	✓		✓
Monoamine	Transporter	Rabbit		✓			
Muscarinic	M1	Human	✓	✓	✓	✓	✓
	M2	Human	✓	✓	✓	✓	✓
	M3	Human	✓	✓	✓	✓	✓
	M4	Human		✓			
	M5	Human		✓			
Na channel		Rat	✓	✓	✓	✓	✓
Neurokinin	NK1	Human	✓	✓	✓		✓
	NK2	Human		✓	✓		✓
Neuropeptide	NPY2	Human	✓	✓			
Neurotensin	NT1	Human		✓			
Norepinephrine	Transporter	Human	✓	✓	✓	✓	✓
Nicotinic	Neuronal	Rat	✓	✓	✓	✓	✓
Opiate	δ	Human	✓	✓	✓	✓	✓
	κ	Human	✓	✓	✓	✓	✓
	μ	Human	✓	✓	✓	✓	✓
	ORL1	Human		✓			
Oxytocin		Human		✓			
PAF		Rabbit	✓	✓	✓		
Prostanoid	EP2	Human		✓			
	EP4	Human		✓			
Serotonin	5HT1A	Human	✓	✓	✓	✓	✓
	5HT1B	Human		✓		✓	✓
	5HT2A	Human	✓	✓	✓	✓	✓
	5HT2B	Human		✓	✓	✓	✓
	5HT2C	Human		✓	✓	✓	✓
	5HT3	Human	✓	✓	✓	✓	✓
5HT4	Guinea pig		✓				
	Transporter	Human	✓	✓	✓	✓	✓
Sigma	σ1	Guinea pig	✓	✓	✓		✓
	σ2	Guinea pig	✓	✓	✓		✓
Vasopressin	V1	Rat	✓	✓	✓		
	V1A	Human				✓	✓
	V1B	Human		✓	✓		
	V2	Human		✓			✓
VIP	VIP	Human		✓	✓		

# of items	60	90	60	50	70
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