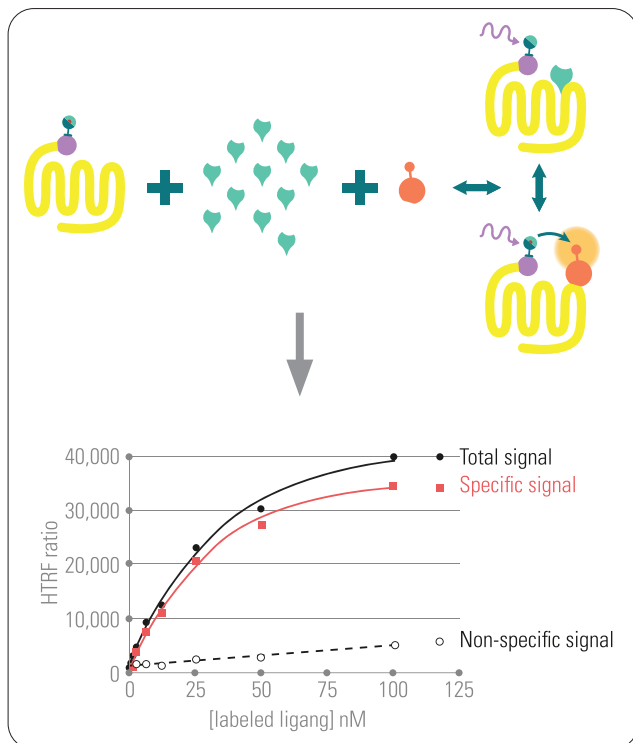




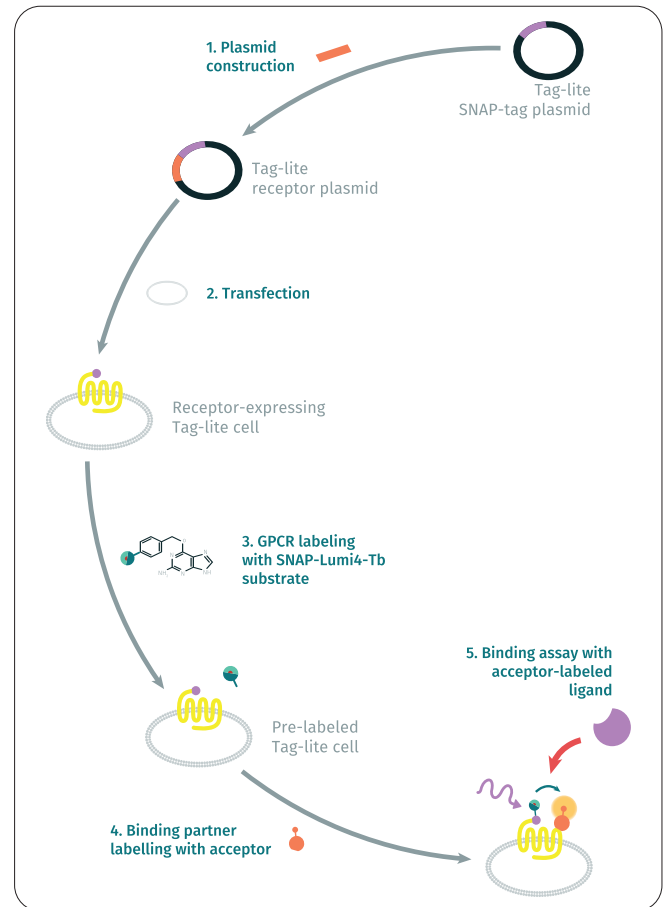
# TAG-lite: the ever-growing binding receptor assay portfolio addresses the complete adenosine receptor family.

## Abstract

Tag-lite® is a cell-based, no-wash alternative to traditional radioisotope assays for studying GPCR-ligand interaction. The receptor of interest is expressed as a SNAP-tag® fusion protein, which is labeled *in situ* with an HTRF® donor fluorophore, while the ligand is conjugated with the HTRF® acceptor fluorophore.



## TAG-lite benefits



5-Step protocol: pick up at any point for more customized assays.

## Scientific relevance

Tag-lite® is quickly becoming the industry standard for studying receptor-ligand binding interaction over time. Tag-lite® continues to demonstrate its effectiveness in the lab, taking the lead over traditional SPA and radioligand binding assays for studying kinetic parameters:

- Saturability and high affinity  $\Rightarrow$  determines  $K_d$  values
- Reversibility and specificity  $\Rightarrow$  correlates  $K_i$  with radioactive data
- Functionality  $\Rightarrow$  second messenger accumulation is unaffected by SNAP-tag®
- A DIY process to label your own receptor

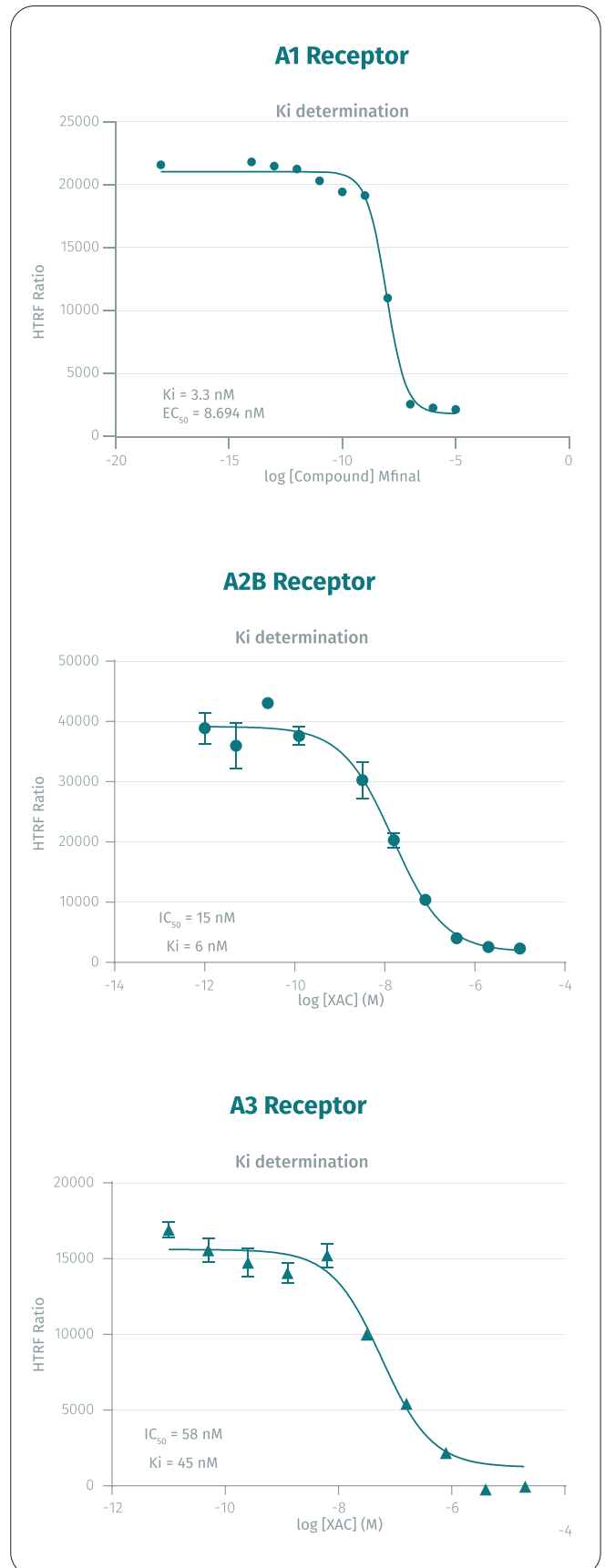
## Added convenience at the bench

- No separation steps = detailed kinetic traces
- Cell-based solution
- No radioactive waste
- Small quantities of labeled ligands

## Revvity offers binding assays for the complete adenosine receptor family

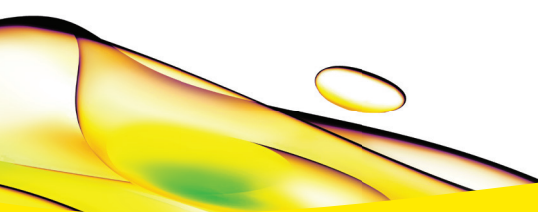
Adenosine is an ubiquitous endogenous molecule that affects almost all aspects of cellular physiology and is the ligand of a receptor subfamily comprised of four members: A1R, A2AR, A2BR & A3R. Due to their closely related structure, wide distribution and diverse roles, developing drugs against these receptors has proved to be a challenge so far.

To assist with adenosine signaling research Revvity has worked to complete the family of receptor binding assays, developing A1R, A2BR and A3R.



TAG-lite: The ever-growing binding receptor assay portfolio addresses the Complete adenosine receptor family.

Family	Receptor	Ligand Part#	Labelled Cell Part#
Adenosine	Adenosine A1	L0058RED	C1TT1A1
Adenosine	Adenosine A2A	L0067RED	C1TT1A2A
Adenosine	Adenosine A2B	L0068RED	C1TT1A2B
Adenosine	Adenosine A3	L0069GRE	C1TT1A3
Adrenoceptor	Adrenergic beta-1	L0023GRE	C1TT1BETA1
Adrenoceptor	Adrenergic beta-2	L0011GRE	C1TT1BETA2
Angiotensin	Angiotensin AT2	L0007RED	C1TT1AT2
Chemokine	Chemokine CXCR4	L0012RED	C1TT1CXCR4
Dopamine	Dopamine D2	L0002RED	C1TT1D2
Glucagon	Glucagon GIPR	L0018RED	C1TT1GIPR
Glucagon	Glucagon GLP1	L0030RED	C1TT1GLP1
Orexin	Orexin OX2	L0025RED	C1TT1OX2
Serotonin	Serotonin 5HT1A	L0029RED	C1TT15HT1A
Serotonin	Serotonin 5HT4	L0043RED	C1TT15HT4
Vasopressin	Vasopressin V2	L0063RED	C1TT1V2
Opioid	Delta-opioid	L0005RED	C1TT1DOP
Opioid	Kappa-opioid		C1TT1KOP
Opioid	Mu-opioid		C1TT1MOP



revvity