

Validated Cell-Based Functional Assays for Early Safety Profiling with Fully Customizable Target Selection

## Custom Panels Tailored to Your Needs

InVEST Functional is the latest addition to our growing InVEST portfolio of enzymatic, biochemical, and radioligand binding safety assays.

InVEST Functional allows you to measure cellular responses associated with the function of your target in a relevant biological context.



Obtain valuable data to guide decision-making, prioritize drug candidates, and understand their potential effects on biological systems before progressing to more complex in vivo studies.

## Why Choose InVEST Functional?

- **Fully Customizable Panels:** design custom-specific target sets and combine with other cell-based or biochemical assays, for results relevant to your specific research.
- **Fast Data Turnaround** from as little as two weeks from compound receipt, allowing you to make informed decisions with confidence.
- **Just-in-Time Testing:** no pre-scheduled runs or hard deadlines. We will be ready when you are.
- **Flexible Assay Conditions:** design your conditions and run up to 10 different compound concentrations in IC<sub>50</sub> format.
- **Accurate and Reliable Results** using state-of-the-art instrumentation.
- **Regulatory Relevance:** obtain crucial insights on your compound safety that help you meet regulatory requirements for IND application filing.
- **Risk Management:** predict your compound's activity before progressing to more complex in vivo studies

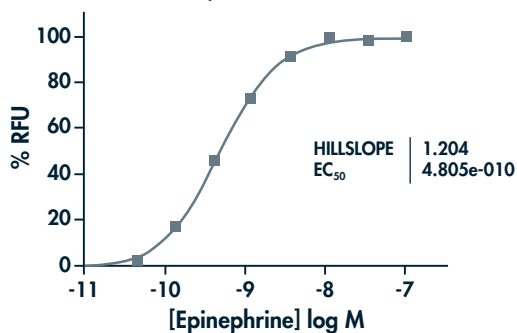
## Available Functional Safety Targets

A curated selection of targets from our growing\* InVEST Functional Safety Panel

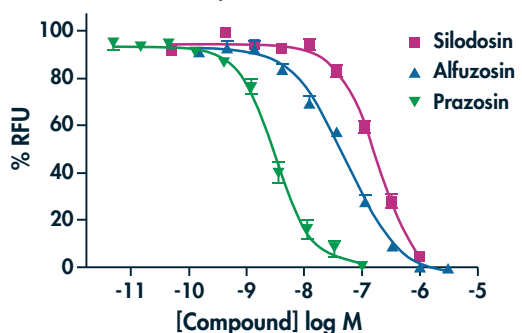
Name	Assay Format	Technology
5-HT <sub>2A</sub> Human Serotonin	Agonist/Antagonist	FLIPR/Ca assay
5-HT <sub>2B</sub> Human Serotonin	Agonist/Antagonist	FLIPR/Ca assay
α <sub>1A</sub> Human Adrenoceptor	Agonist/Antagonist	FLIPR/Ca assay
CB <sub>1</sub> Human Cannabinoid	Agonist/Antagonist	FLIPR/Ca assay
DAT Human Dopamine Transporter	Inhibitor	FLIPR/NT assay
D <sub>1</sub> Human Dopamine	Agonist/Antagonist	Envision/cAMP assay
H <sub>1</sub> Human Histamine	Agonist/Antagonist	FLIPR/Ca assay
M <sub>3</sub> Human Muscarinic	Agonist/Antagonist	FLIPR/Ca assay
μ Human Opioid	Agonist/Antagonist	FLIPR/Ca assay
δ Human Opioid	Agonist/Antagonist	FLIPR/Ca assay
κ Human Opioid	Agonist/Antagonist	FLIPR/Ca assay

\*contact us for additional targets currently under validation

Agonist Mode - Epinephrine EC<sub>50</sub> Data  
CHO-K1/ADRA1A Cell Line



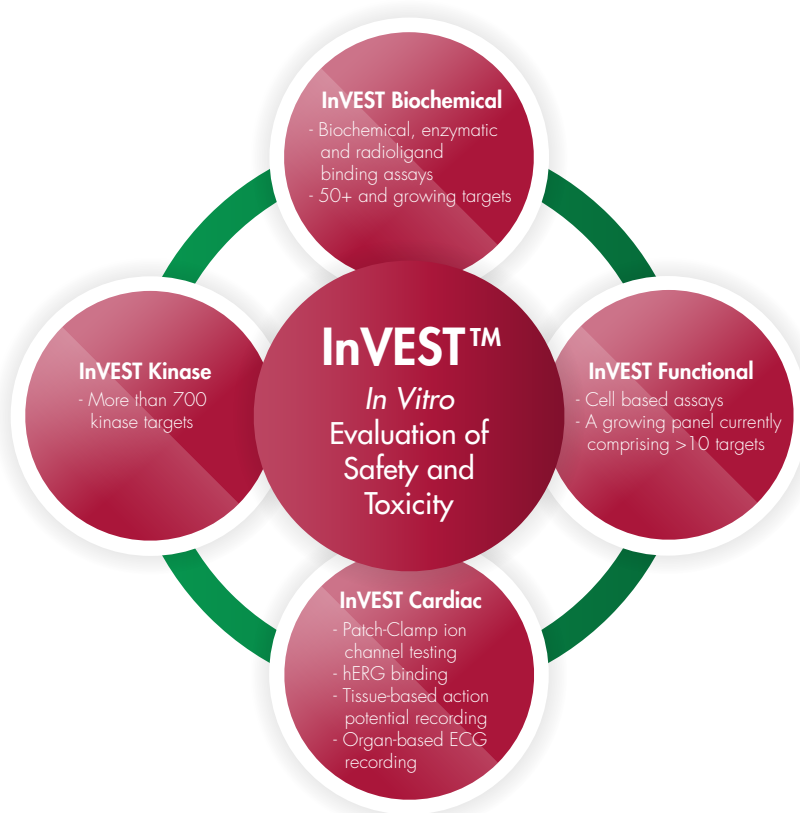
Antagonist Mode - 20 nM Epinephrine  
CHO-K1/ADRA1A Cell Line



Functional cell-based assay for the alpha1A human adrenoceptor in both agonist and antagonist mode

## Looking for a comprehensive understanding of your compound safety profiles?

Reaction Biology's InVEST Safety service offering allows you to **combine functional, cell-based, or biochemical** assays from our growing safety assay catalog into your own **custom panel**, tailored for deeper insights into your discovery programs.



### Get in touch

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