Validated ELISA GUIDE

OVER 16,000 ELISA KITS FOR OVER 20 SPECIES

ASPIRE

TO CURE

ELISAGenie

HIGH QUALITY VALIDATED **ELISA KITS**

About ELISA Genie

ELISA Genie is a proprietary range of ELISA kits developed by Reagent Genie, a global life science reagents company based in London and Dublin.

Founded by **Colm Ryan PhD** and **Seán Mac Fhearraigh PhD,** our goal is to provide you with premium quality ELISA kits along with excellent technical and logistics support, so you can maximise your success.

COLM RYAN PhD
CEO & co-founder of Reagent Genie

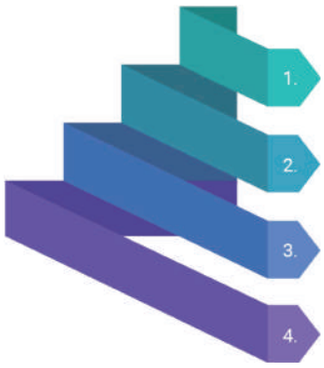
SEÁN MAC FHEARRAIGH PhD
CTO & co-founder of Reagent Genie

Maximum Support & Guarantee

ELISA Genie provides excellence in support to all our customers!

We provide all our customers with application-based technical support before, during and after your experiments. On those rare occasions when problems arise, we have a defined series of customer-centric steps to ensure that you are happy with our product.

So, don't worry, we also offer a 100% money-back guarantee should our products not perform as specified.



- Technical support: email, video, phone
- Troubleshooting
- Replacement kit
- 100% Money-back guarantee

Rapid Global Delivery

Whether you are served by one of our trusted local distributors or are part of our direct sales network, we endeavour to ship your products to you on-time, every time!

Contact us 24/7 on hello@elisagenie.com to find our shipping times to your laboratory.

Key features & data provided with our **ELISA kits :**

Standard Curve | Spike & Recovery | %CV | Linearity | Range

HIGH QUALITY VALIDATED **ELISA KITS**

Sensitivity, Range & CV %

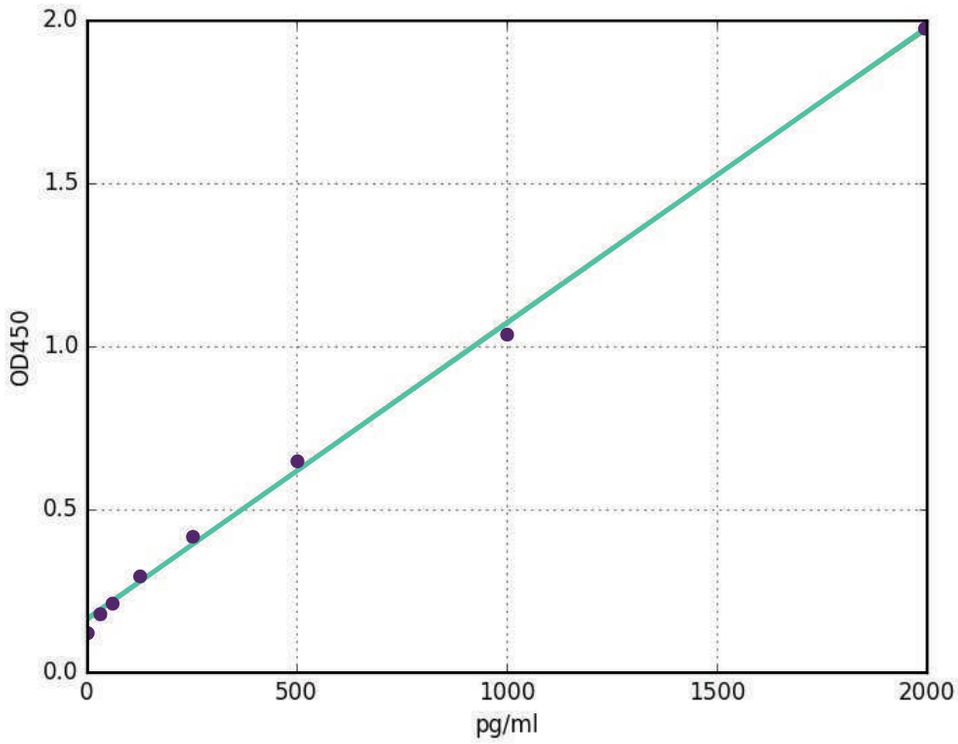
Each ELISA kit we produce is analysed to determine the sensitivity, range and Inter- and Intra-assay variability. This will ensure you know the full capabilities of our ELISA kits including the variability in advance of purchasing.

Spike & Recovery

Not only do we understand the need to illustrate the accuracy of our ELISA kits, but we also know how important it is to see if anything in the sample matrix interferes with antibody-antigen binding, a key step in ELISA. That is why we painstakingly perform linearity and spike recovery analysis on every ELISA kit batch we produce.

Standard Curve

All of our ELISA kits come with standard curve data. For each batch of our ELISA kits, we run a dilution series of our standard recombinant protein to accurately show quantitative results



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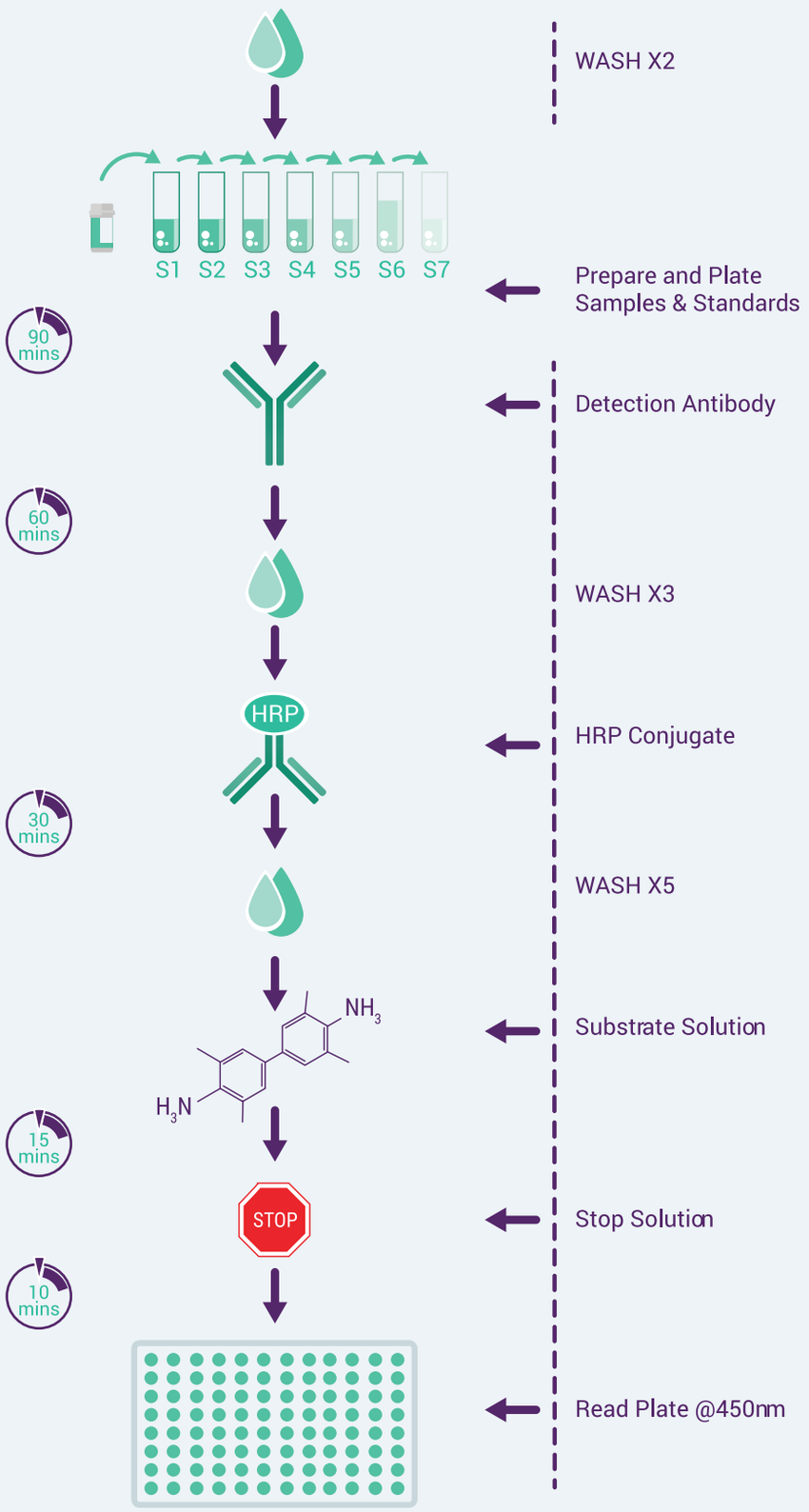
TYPICAL ELISA GENIE **PROTOCOL**



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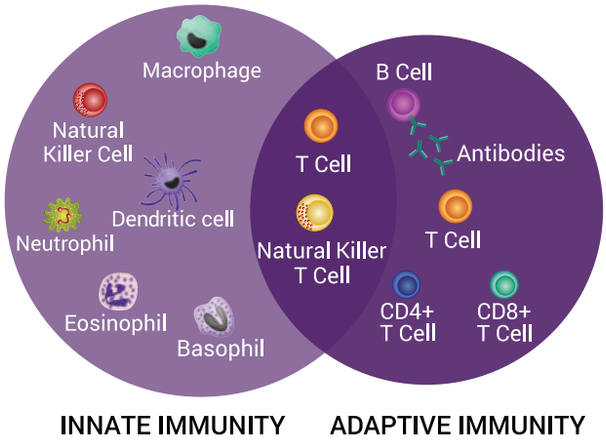
The Immune System

The imune system protects us from infection through two lines of defence, the innate and adaptive immune system. The immune system is highly regulated and balanced. Any perturbations often result in disease or contribute to disease development.

Dysregulation of the immune system can have implications in:

- Autoimmunity
- Allergies
- Asthma
- Cancer
- Transplants and vaccines
- Cardiovascular and metabolic diseases



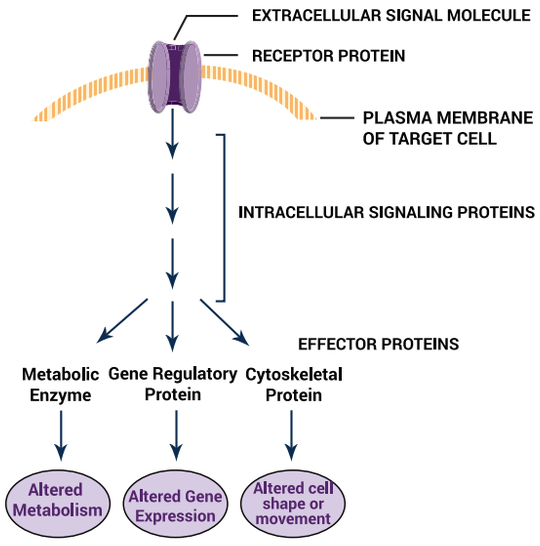
TOP TARGETS

ALCAM	**CRP**
TNF-Alpha	**STAT3**
IL6	**CXCL16**
MPO	**NF-kB**
IFN-Gamma	**LAM**

Cellular Signalling

Cellular signalling enables cells to respond to their immediate environment in a process which involves the generation of a signal, receipt of the signal by a receptor and the generation of a response to the signal. Cellular signalling molecules can be either proteins or chemical molecules e.g growth factors, hormones, neurotransmitters and extra cellular matrix components.

Signalling molecules are recognised by receptors which bind the molecules and initiate a molecular response. Many receptors are transmembrane proteins which bind external signalling molecules and internalise them to induce a cellular response. Some receptors can be found within the cell eg. estrogen. There are three main classes of receptor: G-protein-coupled receptors, ion channel receptors and enzyme linked receptors. Once the receptor binds a signalling molecule also referred to as ligand, a signal transduction cascade is initiated to amplify the message. Receptors can also trigger secondary messengers which aid in signal amplification and propagation e.g. cAMP and DAG. The downstream effects of cellular signalling can lead to alterations in gene expression, metabolism, cell shape, cell movement and other cellular phenomena.

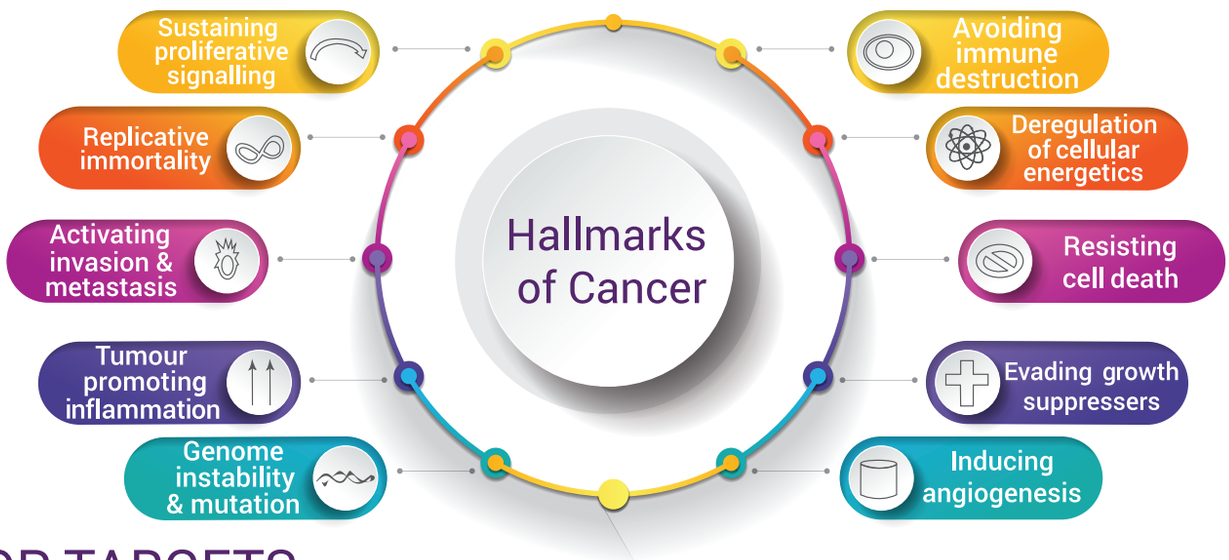


TOP TARGETS

TGF-Beta	**Estrogen**
PI3K	**Notch**
IP3	**cAMP**
DAG	**cGMP**
Progesterone	**Tyrosine Protein Kinase**

Cancer

Cancer is defined as a group of diseases involving abnormal cell growth. During cancer development, the body's cells begin to divide without stopping and eventually spread into the surrounding tissue. The hallmarks of cancer comprise of ten biological capabilities acquired during the multistep development of human tumours. These have been recently updated to include abnormal metabolic pathways, inflammation, genomic instability and immune system evasion.



TOP TARGETS

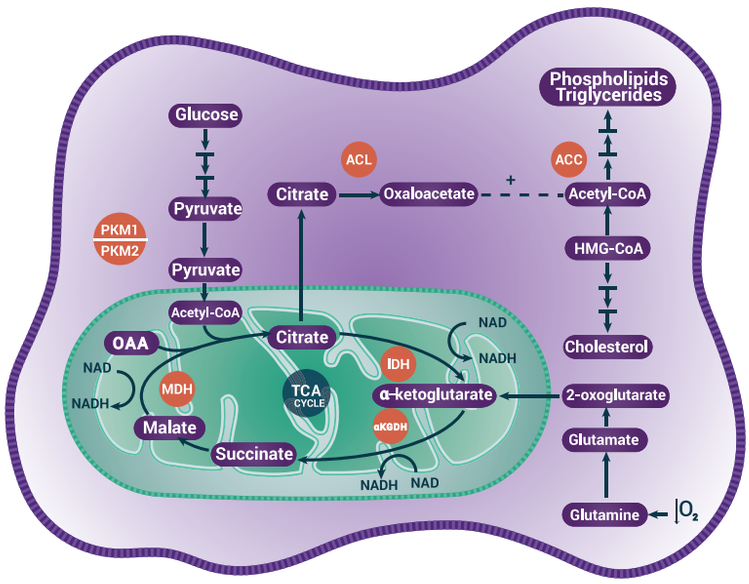
PD-L1	CTLA4
P53	MHC II
RAS	Galectin 3
VEGF	ALK
GM-CSF	NF-kB

METABOLISM

Metabolism

Metabolism is the sum of biochemical processes in living organisms that either produce or consume energy. Alterations in metabolic processes can be identified in many common human diseases such as cancer, diabetes, obesity and heart disease.

Metabolism also plays an important role in cell signalling. It provides the substrates necessary for post-translational modifications responsible for the regulation of protein trafficking, localisation and enzyme activity.



TOP TARGETS

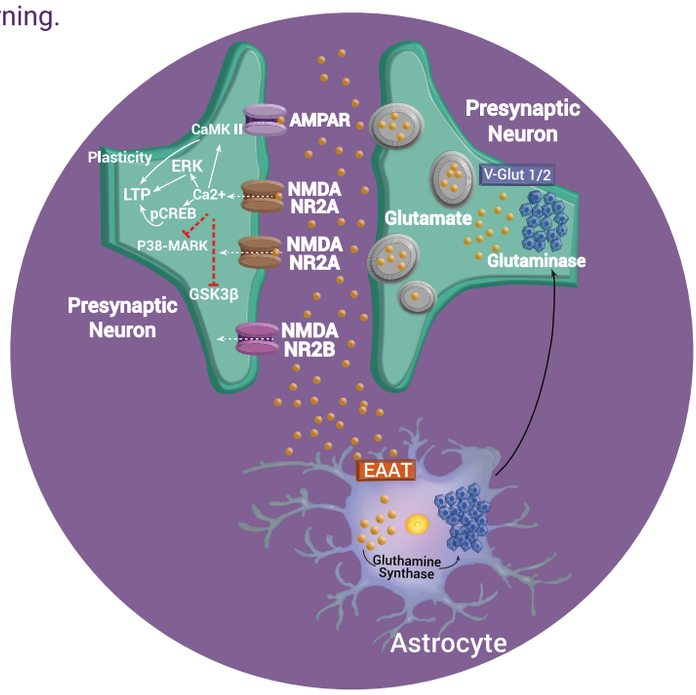
NOS1	UCP2
GLUT2	CYP11A1
Cytochrome C	Succinate Dehydrogenase
ATG5	CYP26A1
Phosphofructokinase	NOX4

Neuroscience

Neuroscience investigates the complex processes of the nervous system enabling investigation into essential functions such as movement, memory and learning.

Medical applications of neuroscience research encompass 3 key areas:

- Synapses, cognition and behaviour.
- Neurodegeneration, neuroprotection and neurorepair.
- Neuropsychiatric and neurodevelopmental disorders.



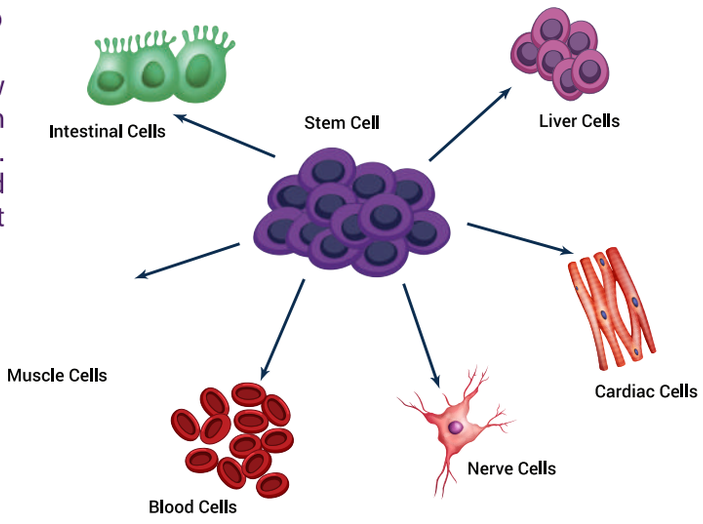
NMDA signalling pathway

TOP TARGETS

B-Amyloid	Melatonin
Tau	CX3CR1
Estradiol	BDNF
RANTES	NGF
TREM2	Cortisol

Stem cells

Stem cells are multipotent cells with the ability to differentiate into a multitude of cell types. Developmental biology primarily focuses on how genes regulate cell growth and differentiation from stem cells to the formation of tissues and organs. Human embryonic stem cells serve as an unlimited source for cells and as a result of this offer great therapeutic potential.



Key areas of stem cells research include:

- **Hematopoietic Stem Cells**
- **Cardiac Stem Cells**
- **Cancer Stem Cells**
- **Neuronal Stem Cells**

TOP TARGETS

BMP	**STAT3**
SOX4	**CD45**
OCT4	**Telomerase**
NANOG	**NF-kB**
SCF	**CD31**