

**KRISHGEN** BioSystems

OUR REAGENTS. YOUR RESEARCH.

# IMMUNE CHECKPOINT ELISA

A RANGE SPECIFIC AND SENSITIVE  
ASSAYS TO MEASURE AND MONITOR  
POPULAR IMMUNE CHECKPOINT  
INHIBITORS AND RELATED ANTIBODY  
DRUGS.

Learn more about our products:

[www.krishgen.com](http://www.krishgen.com)  
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Immune checkpoints are regulators of the immune system, and thus play an integral role in self-tolerance and antigen recognition of the T cell receptors in the process of immune response – specifically, cancer and other such diseases. These checkpoints are vital for maintaining immunological homeostasis by promoting self-tolerance and protecting hosts from inflammatory tissue damage when the immune system is activated. As some cancers stimulate immune checkpoint targets, these molecules make important immunotherapy candidates. Immune checkpoint therapy relies on a functioning immune system with agonists of co-stimulatory signals or antagonists of inhibitory signals.

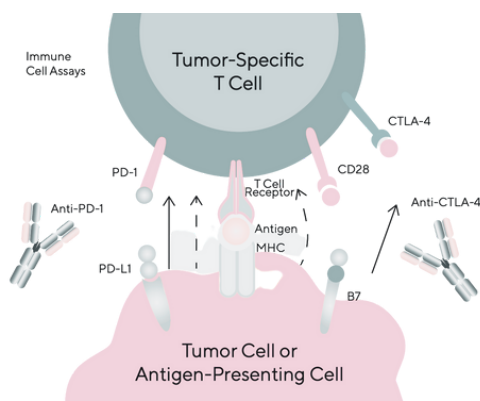


Figure 1. An immune synapse formed between an antigen-presenting (APC) or tumor cell and a tumor-specific T cell. The illustration highlights the interactions targeted by immune checkpoint therapeutics such as anti-PD1 and anti-CTLA-4.

Immune checkpoints are signals for regulating antigen recognition of T cell receptors for immune response. They are of two kinds, depending on the function of their signal:

### **CO-STIMULATORY RECEPTORS**

These include various checkpoint molecules whose stimulation regulates and increases target cell functions. Some of these stimulatory receptor molecules belong to the TNF receptor super family, and the B7-CD28 superfamily. Primarily, they are involved in prompting T cell activation, differentiation / proliferation and expansion.

### **CO-INHIBITORY RECEPTORS**

Also known as immune checkpoint molecules, these inhibitors suppress function of the immune checkpoint pathways, enhancing immunity against cancer. Currently, therapies being developed are blocking antibodies, and they have emerged as a mainstay in several solid tumors and lymphoma etc. Immune checkpoint therapy has elicited robust responses in clinical uses and several new trials are underway for new targets and drugs.

At Krishgen, our dedicated team is focused on identifying and prioritising the most relevant targets and the latest mAb or bsAb drugs in the pipeline to provide cutting-edge assay solutions. From target discovery to IVD or clinical phase analysis, we can support you at every stage of your IO research with the right products for your needs. To ensure the best performance when possible, we test and validate our products in the most relevant models in both healthy and diseased tissue and assays.

Krishgen's offers a range of highly validated checkpoint and immune marker ELISA, as well as mAb-based drug assays to enhance and accelerate research on the tumor microenvironment. Each kit is put through rigorous testing to ensure high precision, accuracy, sensitivity, and specificity. You can be confident that you will obtain reproducible results, day-after-day, and lot-after-lot.

### **Other Available Products from Krishgen:**

360+ Therapeutic Drug Monitoring / mAb-based ELISA for Pharmacokinetic research

40+ Bispecific Antibody Drug ELISA

Biomarker and Cytokine ELISA for Human, Rat, Mouse and 10+ other species

## mAb-based ELISA for Immune Checkpoints

Target Name	Associated mAb drug ELISA				
CTLA4	Ipilimumab	Anti-Ipilimumab			
PD-1	Pembrolizumab	Nivolumab	Anti-Nivolumab	Pembrolizumab	Cemiplimab
PD-L1	Atezolizumab	Anti-Atezolizumab	Avelumab	Durvalumab	Anti-Durvalumab
TIM-3	Cobolimab				
BTLA	Toripalimab				
LAG3 / CD223	Relatlimab				

## Immune Checkpoint Biomarker ELISA

Target Name	Human	Other Species Available					
		Rat	Mouse	Porcine	Goat	Bovine	Others
B7-H3	KBH6190						
B7-H4	KBH6532						
BTLA	KBH6529		●				
CD154	KBH3513	●					
CD155	KBH4780						
CD160	KBH4503		●				
CD226	KBH4093	●	●				
CD27	KBH5018						
CD28	KBH3033	●					
CD40	KBH11145	●	●	●		●	●
CD40 Ligand	KBH3513						●
CD47	KBH4606	●	●				
CD48	KBH5020	●					
CD70	KBH5021						
CD80							
CD86	KBH1572	●	●			●	
CD137	KBH4094						
CEACAM1	KBH2226		●				
CTLA-4	KBH0277		●				
GITR	KBH6339	●					
HVEM	KBH6641						
ICOS			●				
ICOSL	KBH5446		●			●	
Indoleamine-2,3	KBH5463	●	●				
IDO1			●				
LAG3	KBH5606		●				
LIGHT			●				
OX40	KBH3356	●	●				
OX40 Ligand	KBH3845						
PD1		●		●			
PD-L1	KBH5925	●	●				
PD-L2	KBH4206						
SIRPA	KBH6367		●				
TIGIT	KBH6245						
TIM-1	KBH1099	●	●	●	●		●
TIM-3	KBH5390						
VISTA	KBH7878						

## **DIDN'T FIND WHAT YOU'RE LOOKING FOR?**

Krishgen manufactures 20,000+ ELISA across more than 10 species. Talk to our technical team to find the right product for you at [info@krishgen.com](mailto:info@krishgen.com).

Or, get in touch with us to custom develop your assay. Our custom services can help designing and producing sensitive, validated kits for your target(s) of interest.

For more information, please reach out to us at [services@krishgen.com](mailto:services@krishgen.com).

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[www.krishgen.com](http://www.krishgen.com) | [info@krishgen.com](mailto:info@krishgen.com) | +1 (562)-568-5005 | +91 22 49198700

11331, 183rd Street, #431, Cerritos, CA 90703

Unit Nos#318/319, Shah & Nahar, Off Dr E Moses Road, Worli, Mumbai 400018