

## **Inhibitor Screening Kits**

#### Background

Inhibitor screening plays a crucial role in drug development, particularly in the early stages. The process involves screening a large number of candidate molecules to identify those with notable pharmacological effects, which are then further evaluated. To efficiently screen multiple potential inhibitors, rapid and sensitive tools are required.

To efficiently screen multiple potential inhibitors by developing an inhibitor screening platform based on the competitive ELISA method. We offer a series of high-sensitivity inhibitor screening kits that utilize unique in-house biotinylated proteins. These kits are designed for preliminary screening and quality control in drug development, providing researchers with reliable, efficient, and accurate tools for inhibitor screening.

#### **Overview**

Quantity	96 tests
Detection Method	Colorimetric
Method Type	Competitive ELISA
Applications	High-throughput screening antibodies, small molecule inhibitors, peptide, etc.

#### **Product Features**

★ Accurate & reliable: Verified raw materials with high batch-to-batch consistency ensure stable and reliable experimental results.

**★ Easy-to-use & time-saving:** Simple, 4-step ELISA procedure has been pre-validated to eliminate time-consuming method development and validations.

★ Minimal Matrix Effects: Interfering substances, including DMSO, were studied to ensure kit compatibility with small and macro-molecule inhibitors.

★ High repeatability: Kits are highly stable and have minimal lot-to-lot variation and use our site-specific biotin labeling platform.

### Distributed by: CliniSciences Group

#### **Schematic Diagram**



Notes: The assay employs a simple colorimetric ELISA platform which is based on the competitive binding technique. (The principles between different inhibitor screening kits are slightly different)

The experimental protocol includes 4 short steps:

- 1. Coat the plate with human PD-L1.
- 2. Add Human PD-1-Biotin to bind the coated human PD-L1.
- 3. Add your molecule of interest to the tests.
- 4. Add Streptavidin-HRP followed by TMB or other colorimetric HRP substrate.

Finally, the ability of your compound to inhibit PD-1: PD-L1 binding will be determined by comparing OD readings among different experimental groups.

#### **Components**

Take PD-1 [Biotinylated] : PD-L1 Inhibitor Screening ELISA Kit (EP-101) for example.

ID	Components	Size
EP101-C01	High-bind Plate	1 plate
EP101-C02	Human PD-L1	25 µg
EP101-C03	Anti-PD-1 Neutralizing Antibody	20 µg
EP101-C04	Human PD-1-Biotin	5 µg
EP101-C05	Streptavidin-HRF	10 µg
EP101-C06	Coating Buffer	12 mL
EP101-C07	10xWashing Buffer	50 mL
EP101-C08	Blocking Buffer	50 mL
EP101-C09	Substrate Solution	12 mL
EP101-C10	Stop Solution	7 mL

### Distributed by: CliniSciences Group

#### **Supplement Data**

• Inhibition of PD-1: PD-L1 binding by anti-PD-1 neutralizing antibody measured using the PD-1 [biotinylated]: PD-L1 inhibitor screening ELISA assay pair (*Cat. No. EP-101*).



Anti-PD-1 neutralizing antibody was diluted from 10 μg/mL to 0.078 μg/ mL (69.628 nM to 0.544 nM) and loaded onto the plate coated by human PD-L1 in the presence of human PD-1-Biotin. Assay was performed according to the protocol in PD-1[Biotinylated] : PD-L1 Inhibitor Screening ELISA Assay Pair. Background was subtracted from data points prior to log transformation and curve fitting (QC tested).

• Inhibition of IL-4: IL-4 R alpha binding by Human IL-4 measured using IL-4 [biotinylated]: IL-4 R alpha inhibitor screening kit (*Cat. No. EP-132*).



Serial dilutions of Human IL-4(Catalog # EP132-C03) (1:1 serial dilution, from 5 µg/mL to 0.01 µg/mL (295.86-0.58 nM)) was added into IL-4 R alpha: IL-4-Biotin binding reactions. The assay was performed according to the above-described protocol. Background was subtracted from data points prior to log transformation and curve fitting (QC tested).

 Inhibition of CD47: SIRP alpha binding by anti-CD47 neutralizing antibody measured using CD47: SIRP alpha [biotinylated] inhibitor screening assay pair (*Cat. No. EP-102*).



Serial dilutions of anti-CD47 neutralizing antibody (Catalog # CD7-NA002) (1:2 serial dilutions, from 10 µg/mL to 0.04 µg/mL or 66.67 nM to 0.26 nM) was added into CD47: biotinylated SIRP alpha binding reactions. Background was subtracted from data points prior to log transformation and curve fitting (QC tested).

• Inhibition of Integrin  $\alpha 4 \beta 7$ : MAdCAM-1binding by anti-Integrin  $\alpha 4 \beta 7$  neutralizing antibody measured using Integrin  $\alpha 4 \beta 7$ : MAdCAM-1 [Biotinylated] inhibitor screening kit (*Cat. No. EP-155*)



Serial dilutions of Anti-Integrin a 4  $\beta$  7 Neutralizing antibody (Catalog # EP155-C04) (1:1 serial dilution, from 5  $\mu$ g/mL to 0.0098 $\mu$ g/mL) was added into Integrin a 4  $\beta$  7: Biotinylated MAdCAM-1 binding reactions. The assay was performed according to the protocol described below. Background was subtracted from data points prior to log transformation and curve fitting (QC tested).





Serial dilutions of AMP-CP (1:1 serial dilution, from 500µm/L to 0.244140625µm/L) was added into CD73: AMP binding reactions. The assay was performed according to the protocol described below. Background was subtracted from data points prior to log **Distributed tby1** curve fitting (QC tested).

#### **Product List**

Cat. No.	Product Description	Detection mechanism
EP-116	B7-1 [Biotinylated] : CTLA-4 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-117	B7-2 [Biotinylated] : CTLA-4 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-119	BAFFR [Biotinylated] : BAFF Inhibitor Screening ELISA Kit	Colorimetric assay
EP-127	BCMA [Biotinylated] : APRIL Inhibitor Screening ELISA Kit	Colorimetric assay
EP-118	BCMA [Biotinylated] : BAFF Inhibitor Screening ELISA Kit	Colorimetric assay
EP-121	CD27L [Biotinylated] : CD27 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-150	CD28 : B7-1 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-151	CD28 : B7-2 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-135	CD30 [Biotinylated] : CD30L Inhibitor Screening ELISA Kit	Colorimetric assay
EP-160	CD47 : SIRP gamma [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-138	CD47 [Biotinylated] : SIRP alpha Inhibitor Screening ELISA Kit	Colorimetric assay
EP-152	CD47 [Biotinylated] : SIRP alphaV2 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-102	CD47: SIRP alpha [Biotinylated] Inhibitor Screening ELISA Assay Pair	Colorimetric assay
EP-125	CTLA-4 [Biotinylated] : B7-1 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-126	CTLA-4 [Biotinylated] : B7-2 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-148	LIGHT : HVEM [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-153	LIGHT : LTBR [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-162	OX40 [Biotinylated] : OX40 Ligand Inhibitor Screening ELISA Kit	Colorimetric assay
EP-130	PD-1 : PD-L1 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-154	PD-1 : PD-L2 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-101	PD-1 [Biotinylated] : PD-L1 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-120	PD-1 [Biotinylated] : PD-L2 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-133	PD-L1 : PD-1 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-134	PD-L1 [Biotinylated] : B7-1 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-158	PD-L1 [Biotinylated] : PD-1 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-157	Mouse PD-L1 : Mouse PD-1 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-122	PVRIG : Nectin2 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-131	TIGIT : CD155 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-165	TNF-alpha : TNFR1[HRP] Inhibitor Screening ELISA Kit-Pre coated plate	Colorimetric assay
EP-161	TNF-alpha : TNFR2 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-143	TNF-alpha [Biotinylated] : TNFR1 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-147	TNF-alpha [Biotinylated] : TNFR2 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-145	TNFSF11 : Osteoprotegerin Inhibitor Screening ELISA Kit	Colorimetric assay

### Distributed by: CliniSciences Group

Cat. No.	Product Description	Detection mechanism
EP-144	TNFSF11 : RANK Inhibitor Screening ELISA Kit	Colorimetric assay
EP-164	GDF15 [Biotinylated] : GFRAL Inhibitor Screening ELISA Kit	Colorimetric assay
EP-159	IL-11 : IL-11R [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-156	IL-12B : IL-12RB1 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-149	IL-13RA2 [Biotinylated] : IL-13 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-140	IL-17A : IL-17RA [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-139	IL-17A [Biotinylated] : IL-17RA Inhibitor Screening ELISA Kit	Colorimetric assay
EP-167	IL-23 : IL-23R[Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-132	IL-4 [Biotinylated] : IL-4Rα Inhibitor Screening ELISA Kit	Colorimetric assay
EP-142	IL-4Rα [Biotinylated] : IL-4 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-128	IL-5 [Biotinylated]:IL-5Ra Inhibitor Screening ELISA Kit	Colorimetric assay
EP-146	IL-6 [Biotinylated] : IL-6 R alpha Inhibitor Screening ELISA Kit	Colorimetric assay
EP-155	Integrin a 4 $\beta$ 7 : MAdCAM-1 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-103	PCSK9 [Biotinylated] : LDL R Inhibitor Screening ELISA Assay Pair	Colorimetric assay
EP-129	TSLP[Biotinylated]:IL-7Ra & TSLP R Inhibitor Screening ELISA Kit	Colorimetric assay
EP-137	VEGFA : VEGFR2 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-141	VEGFA [Biotinylated] : VEGFR2 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-166	CD73 Inhibitor Screening Kit	Colorimetric assay

# Copyright Statement

# 66

This material is copyrighted by the Company. All rights in this material are reserved by the Company. Unless otherwise indicated in writing, all material in this material is copyrighted by the Company. No part of this material may be copied, photocopied or reproduced in any form or redistributed to any other person or used in any other manner which infringes the Company's copyright without the prior written authorisation of the Company.

# **CliniSciences** Group

#### Austria

Company: CliniSciences GmbH Address: Sternwartestrasse 76, A-1180 Wien - Austria Telephone: +43 720 115 580 Fax: +43 720 115 577 Email: oesterreich@clinisciences.com Web: https://www.clinisciences.com

#### Finland

Company: CliniSciences ApS Address: Oesterbrogade 226, st. 1, Copenhagen, 2100 - Denmark Telephone: +45 89 888 349 Fax: +45 89 884 064 Email: suomi@clinisciences.com Web: https://www.clinisciences.com

#### Iceland

Company: CliniSciences ApS Address: Oesterbrogade 226, st. 1, Copenhagen, 2100 - Denmark Telephone: +45 89 888 349 Fax: +45 89 884 064 Email: island@clinisciences.com Web: https://www.clinisciences.com

#### Netherlands

Company: CliniSciences B.V. Address: Kraijenhoffstraat 137A, 1018RG Amsterdam, - Netherlands Telephone: +31 85 2082 351 Fax: +31 85 2082 353 Email: nederland@clinisciences.com Web: https://www.clinisciences.com

#### Portugal

Company: Quimigen Unipessoal LDA Address: Rua Almada Negreiros, Lote 5, Loja 14, 2615-275 Alverca Do Ribatejo - Portugal Telephone: +351 30 8808 050 Fax: +351 30 8808 052 Email: info@quimigen.com Web: https://www.quimigen.pt

#### Switzerland

Company: CliniSciences AG Address: Fracht Ost Flughafen Kloten CH-8058 Zürich - Switzerland Telephone: +41 (044) 805 76 81 Fax: +41 (044) 805 76 75 Email: switzerland@clinisciences.com Web: https://www.clinisciences.com

#### Belgium

Company: CliniSciences S.R.L Address: Avenue Stalingrad 52, 1000 Brussels - Belgium Telephone: +32 2 31 50 800 Fax: +32 2 31 50 801 Email: belgium@clinisciences.com Web: https://www.clinisciences.com

#### France

Company: CliniSciences S.A.S Address: 74 Rue des Suisses, 92000 Nanterre- France Telephone: +33 9 77 40 09 09 Fax: +33 9 77 40 10 11 Email: info@clinisciences.com Web: https://www.clinisciences.com

#### Ireland

Company: CliniSciences Limited Address: Ground Floor, 71 lower Baggot street Dublin D02 P593 - Ireland Telephone: +353 1 6971 146 Fax: +353 1 6971 147 Email: ireland@clinisciences.com Web: https://www.clinisciences.com





Company: CliniSciences AS Address: c/o MerVerdi Munkerudtunet 10 1164 Oslo - Norway Telephone: +47 21 988 882 Email: norge@clinisciences.com Web: https://www.clinisciences.com

Spain

υĸ

Company: CliniSciences Lab Solutions Address: C/ Hermanos del Moral 13 (Bajo E), 28019, Madrid - Spain Telephone: +34 916 750 700 Fax: +34 91 269 40 74 Email: espana@clinisciences.com Web: https://www.clinisciences.com

Company: CliniSciences Limited

Telephone: +44 (0)1753 866 511

Email: uk@clinisciences.com

Fax: +44 (0)1753 208 899

Parkway, SL1 6DQ Slough- United Kingdom

or +44 (0) 330 684 0982

IWeb: https://www.clinisciences.com

Version 07-01-2025



#### Denmark

Company: CliniSciences ApS Address: Oesterbrogade 226, st. 1, Copenhagen, 2100 - Denmark Telephone: +45 89 888 349 Fax: +45 89 884 064 Email: danmark@clinisciences.com Web: https://www.clinisciences.com

#### Germany

Company: Biotrend Chemikalien GmbH Address: Wilhelm-Mauser-Str. 41-43, 50827 Köln - Germany Telephone: +49 221 9498 320 Fax: +49 221 9498 325 Email: info@biotrend.com Web: https://www.biotrend.com

#### Italy

Company: CliniSciences S.r.I Address: Via Maremmana inferiore 378 Roma 00012 Guidonia Montecelio - Italy Telephone: +39 06 94 80 56 71 Fax: +39 06 94 80 00 21 Email: italia@clinisciences.com Web: https://www.clinisciences.com

#### Poland



Company: CliniSciences sp.Z.o.o. Address: ul. Rotmistrza Witolda Pileckiego 67 lok, 200 - 02-781 Warszawa -Poland Telephone: +48 22 307 0535 Fax: +48 22 307 0532 Email: polska@clinisciences.com Web: https://www.clinisciences.com

#### Sweden

Company: CliniSciences ApS Address: Oesterbrogade 226, st. 1, Copenhagen, 2100 - Denmark Telephone: +45 89 888 349 Fax: +45 89 884 064 Email: sverige@clinisciences.com

Web: https://www.clinisciences.com

#### USA

Company: Biotrend Chemicals LLC Address: c/o Carr Riggs Ingram, 500 Grand Boulevard, Suite 210 Miramar Beach, FL 32550- USA Telephone: +1 850 650 7790 Fax: +1 850 650 4383 Email: info@biotrend-usa.com Web: https://www.biotrend-usa.com



