

Expand YOUR IMMUNE CHECKPOINT RESEARCH

By Multiplexing Your Mouse Tumor Models

Choose from 28 immuno-oncology analytes

Immune checkpoint proteins are regulators of immune activation and play a key role in maintaining immune homeostasis, preventing autoimmunity, and are involved in cancer immune escape. These immune system molecules demonstrate the ability to act both as agonists (co-stimulatory checkpoint molecules) or

antagonists (co-inhibitory checkpoint molecules) of immune responses. Whether you are researching in this area or investigating potential immunotherapies, MILLIPLEX® kits offer a variety of assays to facilitate your discoveries, including our Mouse Immuno-Oncology Checkpoint Protein Panel 1.

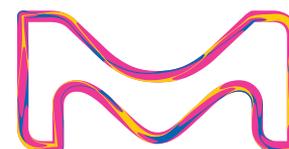
MILLIPLEX® Mouse Immuno-Oncology Checkpoint Protein Panel 1

Analyte	Standard Curve Range (pg/mL)	Sensitivity MinDC + 2SD (pg/mL)	Accuracy (%)
4-1BBL/TNFSF9	14 – 10,000	7.9	105
5'-NT/CD73	137 – 100,000	117.0	106
B7-H2/ICOSL	27 – 20,000	16.4	110
B7-H3/CD276	3.4 – 2,500 ng/mL	4.5 ng/mL	95
BCA-1/CXCL-13	27 – 20,000	13.2	105
BTLA	21 – 15,000	15.3	111
CD137/4-1BB	5.5 – 4,000	2.9	107
CD226/DNAM-1	14 – 10,000	11.0	110
CD25/IL-2Ra	2.7 – 2,000	2.3	105
CD27	55 – 40,000	41.0	107
CD40	14 – 10,000	8.5	109
CD80/B7-1	34.3 – 25,000	25.1	103
CTLA-4/CD152	5.5 – 4,000	4.8	104
E-Cadherin	342 – 250,000	212.8	108

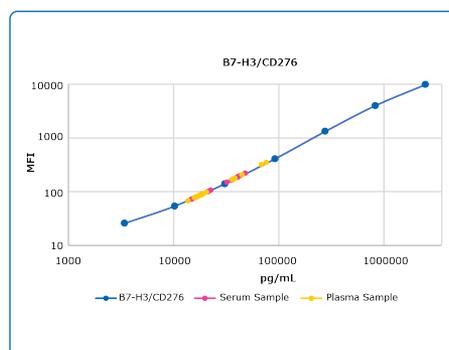
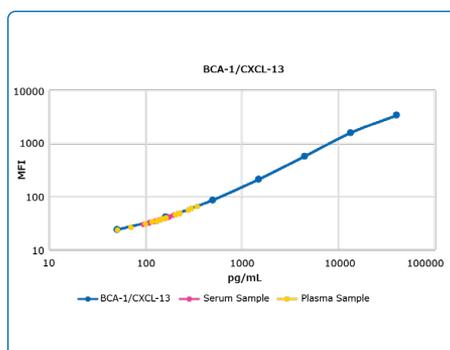
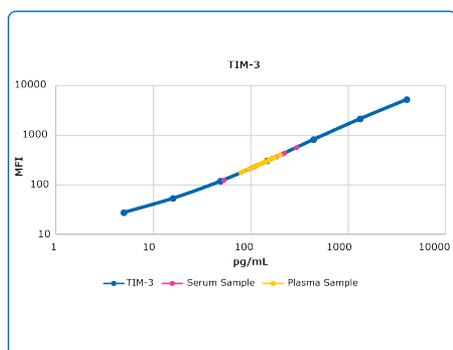
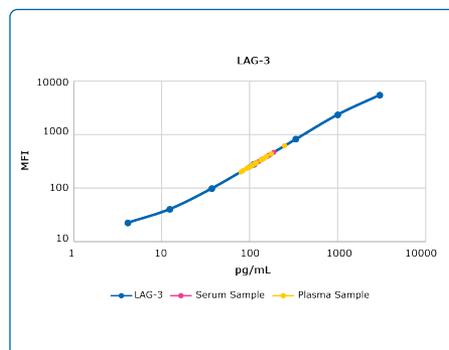
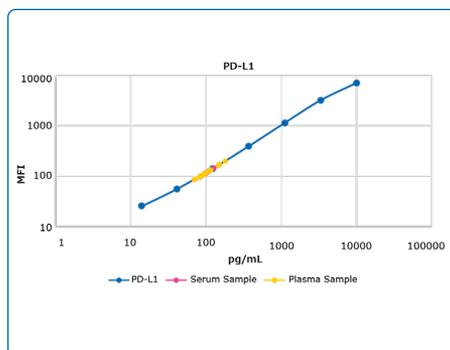
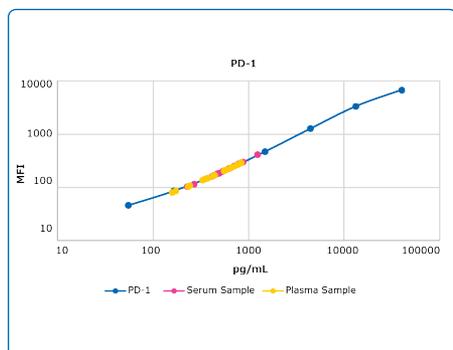
Analyte	Standard Curve Range (pg/mL)	Sensitivity MinDC + 2SD (pg/mL)	Accuracy (%)
Galectin-1	3.4 – 2,500 ng/mL	5.0 ng/mL	101
Galectin-3	41 – 30,000	40.7	108
GITR	41 – 30,000	31.9	109
Granzyme B	8.2 – 6,000	8.0	94
HVEM	1.4 – 1,000	1.8	108
IFNγ	2.1 – 1,500	1.8	103
IL-10	11 – 8,000	9.0	105
LAG-3	412 – 300,000	372.1	105
PD-1	55 – 40,000	39.8	106
PD-L1	14 – 10,000	8.0	96
PD-L2	6.9 – 5,000	5.7	104
TIM-3	5.5 – 4,000	2.4	106
TLR-2	412 – 300,000	296.7	104
TNFα	4.1 – 3,000	5.3	106

MILLIPLEX® Mouse Immuno-Oncology Checkpoint Protein Panel 1

Cat. No.	MILLIPLEX® Kit
To Order This Assay	
MCKP1-110K	Mouse Immuno-Oncology Checkpoint Protein Panel 1
MCKP1-110K PX28	
MCKP1-110K-PBK28	
Related Immuno-Oncology Checkpoint Protein Assays	
HCKP1-11K	Human Immuno-Oncology Checkpoint Protein Panel 1
HCKP1-11K-PX17	
HCKP1-11K-PXBK17	
HCKP2-11K	Human Immuno-Oncology Checkpoint Protein Panel 2



Circulating mouse cancer-immunity biomarkers as measured by a multiplex immunoassay.



Selected analytes from the Mouse Immuno-Oncology Checkpoint Protein Panel 1 (Cat. No. MCKP1-110K). Commercially sourced Swiss-Webster (n=12) and CD1 (n=6) normal mouse serum (n=18 total, magenta) and plasma samples (n=18 total, yellow) were run in the assay according to the protocol. Data was analyzed using BELYSA® Immunoassay Curve Fitting Software (Cat. No. 40-122). Standards and fitted curve are shown in blue.

Don't see your assay or analyte of interest?

For information regarding all available assays and custom assay development services, please visit [SigmaAldrich.com/milliplex](https://www.sigmaaldrich.com/milliplex)

MILLIPLEX® kits are manufactured in facilities which are ISO 9001:2015 compliant and are for research use only (RUO), not for use in clinical or for medical diagnostic purposes.

To place an order or receive technical assistance in Europe, please call Customer Service:
France: 0825 045 645
Germany: 069 86798021
Italy: 848 845 645
Spain: 901 516 645 Option 1
Switzerland: 0848 645 645
United Kingdom: 0870 900 4645

For other countries across Europe, please call: +44 (0) 115 943 0840
Or visit: [SigmaAldrich.com/offices](https://www.sigmaaldrich.com/offices)
For Technical Service visit: [SigmaAldrich.com/techservice](https://www.sigmaaldrich.com/techservice)

Merck KGaA
Frankfurter Strasse 250
64293 Darmstadt, Germany

[SigmaAldrich.com](https://www.sigmaaldrich.com)

© 2022 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved. Merck, the vibrant M, Millipore, MILLIPLEX, and BELYSA are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources.

