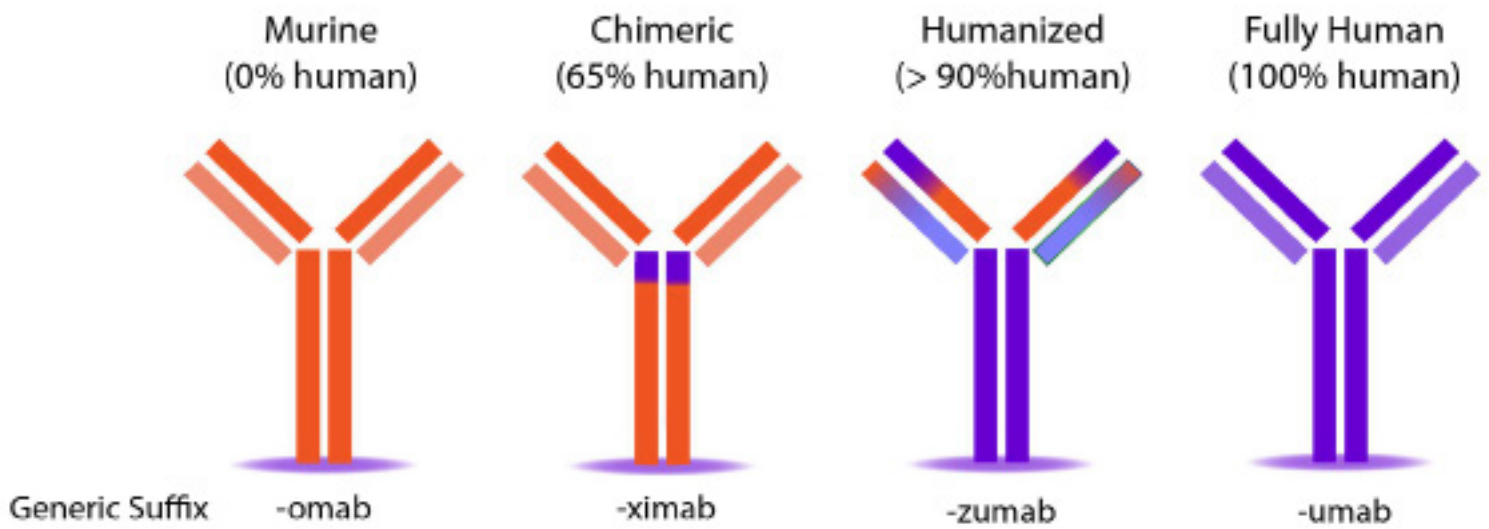


Biosimilar Antibodies & ELISA Kits



Human IgG based monoclonal antibodies (mAbs) are the fastest-growing category of therapeutics for cancer therapy. With various degree of humanization of the antibody developed from murine, large foreign biologic antibodies are able to detect and kill tumor cells. Several mechanisms of tumor cell killing by antibodies (mAbs) can be summarized as: direct action through receptor blockade or induction of apoptosis; immune-mediated cell killing by complement-dependent cytotoxicity (CDC), antibody-dependent cellular cytotoxicity (ADCC) or regulation of T cell function. Several monoclonal antibodies have received FDA approval for the treatment of a variety of solid tumors and hematological malignancies. BioVision is pleased to offer research-grade biosimilar antibodies and ELISA kits for your research needs. These antibodies can be used as controls for preclinical lead identification and potency assays for the development of novel therapeutics; ELISA kits can be used to identify biomarkers for (non-)response and risk factors for adverse drug reactions.

Antibody (Immunoglobulin secreted by B cells)

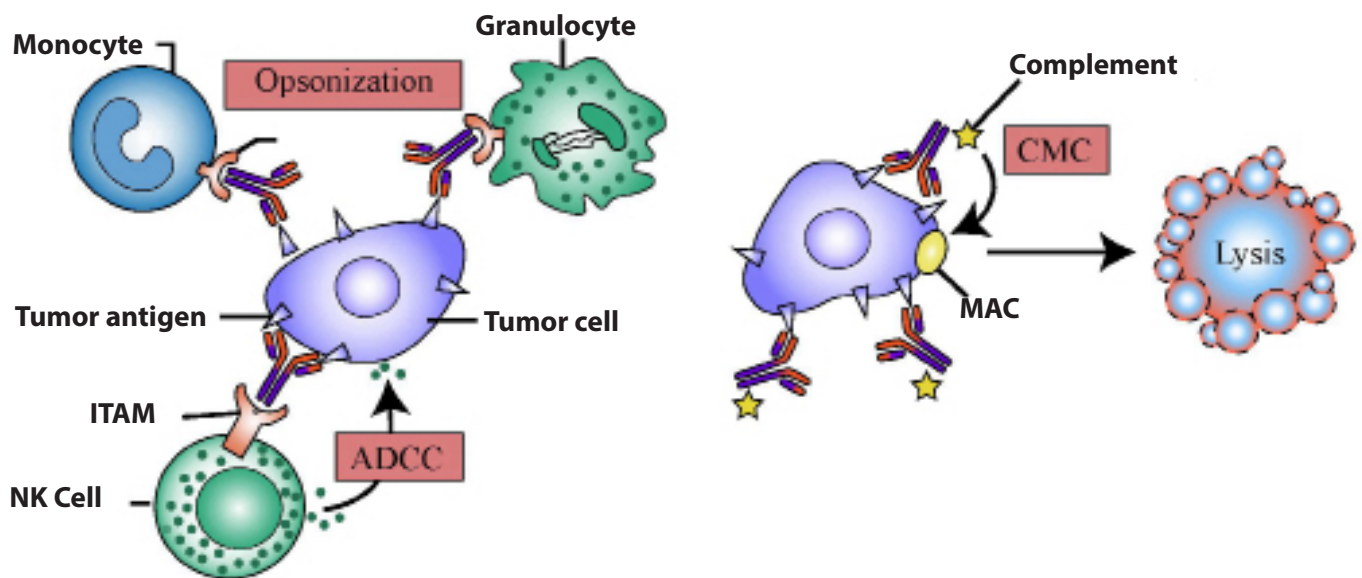
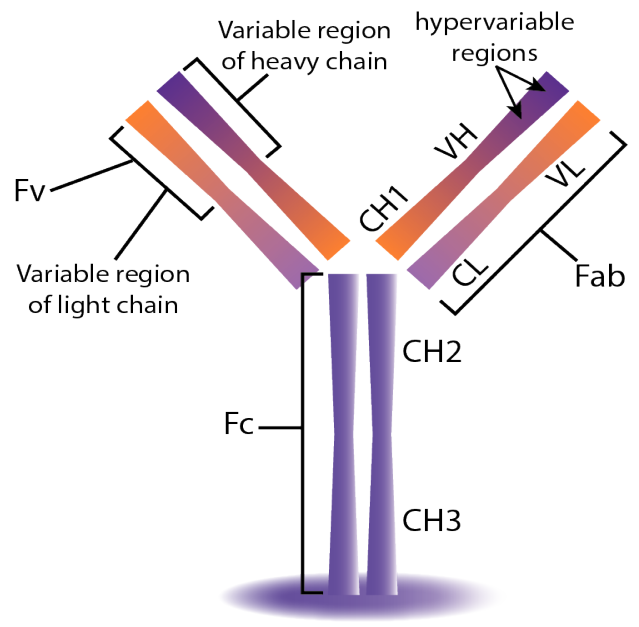


Figure A: Immune-mediated effects of tumour-specific IgG

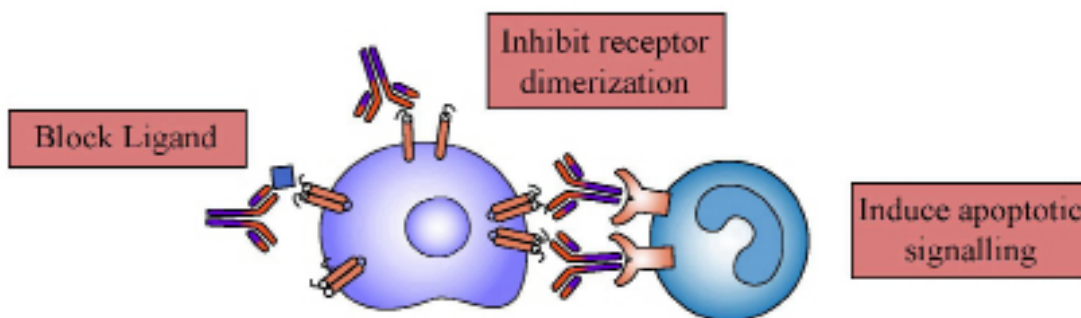


Figure B: Direct effects of tumour-specific IgG

Biosimilar Antibodies

Research grade biosimilars-monoclonal antibodies are manufactured using recombinant technology. These antibodies are ideal research tools for preclinical lead identification and potency assays for the development of novel therapeutics.

Key Features:

- **No additives:** Supplied in PBS buffer with preservative (0.02% Proclin™ 300)
- **High purity:** >98% purity as determined by SDS-PAGE
- **Low endotoxin:** <1 EU/μg as determined by the LAL-method
- **Versatile:** Can be used for various applications; ELISA, Neutralization, Flow Cytometry, IHC, IF

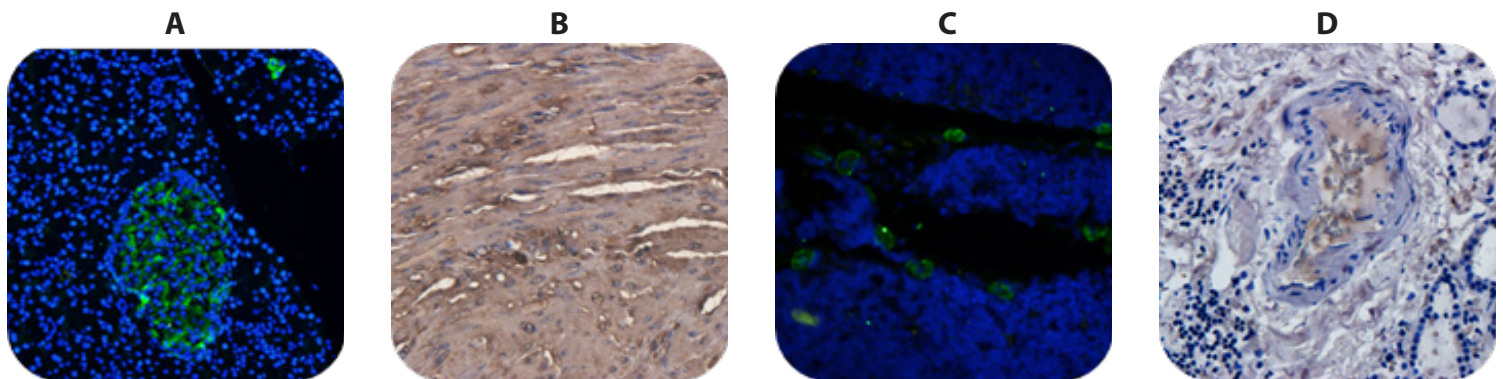


Figure: Immunofluorescent and Immunohistochemical staining using Anti-Carcinoembryonic antigen (Arcitumomab), Human IgG1 Antibody (Cat. No. A1096-100) (A & B) and Anti-CD52 (Campath-1H), Human IgG1 Antibody (Cat. No. A1105-100) (C & D).

Biosimilar Antibodies

Product Name	Trade Name	Cat. No.	Isotype (Human)	Size
Anti-alpha 5 beta 1 Integrin (Volociximab), Human IgG4 Antibody	-	A1092	IgG4	200 μg
Anti-Carcinoembryonic antigen (Arcitumomab), Human IgG1 Antibody	CEA-Scan	A1096	IgG1	200 μg
Anti-CD11a (Efalizumab), Human IgG1 Antibody	Raptiva	A1089	IgG1	200 μg
Anti-CD20 (Rituximab), Chimeric Antibody	Mabthera	A1049	IgG1	100 μg
Anti-CD4 (Clenoliximab), Human IgG4 Antibody	-	A1091	IgG4	200 μg
Anti-CD40L (Ruplizumab), Human IgG1 Antibody	Antova	A1094	IgG1	200 μg
Anti-CD52 (Campath-1H), Human IgG1 Antibody	Campath	A1105	IgG1	200 μg
Anti-EGFR (Cetuximab), Chimeric Antibody	Erbitux	A1047	IgG1	100 μg
Anti-EGFR (Matuzumab), Human IgG1 Antibody	-	A1090	IgG1	200 μg
Anti-EGFR (Panitumumab), humanized antibody	Vectibix	A1050	IgG1	100 μg
Anti-HER2 (Trastuzumab), humanized Antibody	Herceptin	A1046	IgG1	100 μg
Anti-IL-2R alpha (CD25) (Basiliximab), Human IgG1 Antibody	Simulect	A1098	IgG1	200 μg
Anti-IL-2R alpha (Daclizumab), Human IgG1 Antibody	Zenapax	A1099	IgG1	200 μg
Anti-OX40L (Oxelumab), Human IgG1 Antibody	Xolair	A1088	IgG1	200 μg
Anti-PD-1 (Nivolumab), Humanized Antibody	Opdivo	A1307	IgG1	100 μg
Anti-PD-1 (Pembrolizumab), Humanized Antibody	Keytruda	A1306	IgG1	100 μg
Anti-PD-L1 (Atezolizumab), Humanized Antibody	Tecentriq	A1305	IgG1	100 μg
Anti-TNF alpha (Humicade), Human IgG4 Antibody	Humicade	A1093	IgG4	200 μg
Anti-TNF alpha (Infliximab), Human IgG1 Antibody	Remicade	A1097	IgG1	200 μg
Anti-TNF-α (Adalimumab), humanized Antibody	Humira	A1048	IgG1	100 μg
Anti-VEGF (Bevacizumab), humanized Antibody	Avastin	A1045	IgG1	100 μg
Anti-RSV (Felvizumab), Human IgG1 Antibody	-	A1446	IgG1	200 μg
Anti-TNF alpha (Humicade), Human IgG4 Antibody	Humicade	A1093	IgG4	200 μg

Product Name	Trade Name	Cat. No.	Isotype (Human)	Size
Anti-TNF alpha (Infliximab), Human IgG1 Antibody	Remicade	A1097	IgG1	200 µg
Anti-TNF-α (Adalimumab), humanized Antibody	Humira	A1048	IgG1	100 µg
Anti-VEGF (Bevacizumab), humanized Antibody	Avastin	A1045	IgG1	100 µg

BioSim™ ELISA Kits for Biosimilar Antibodies

BioSim™ ELISA kits are designed to detect and quantify the biosimilar antibodies in human serum and plasma. It measures the free-form of biosimilar antibodies in patients or study dose-dependent pharmacokinetics in animals as well as to identify biomarkers for (non-)response and risk factors for adverse drug reactions.

Key Features:

- **Ready to use**
- **Rapid and Simple:** No expensive equipment or special handling/disposal required
- **Accurate:** Reproducible results with low intra & inter assay variability
- **Highly Sensitive and Specific:** No significant cross-reactivity or interference with other proteins present in native human serum or other therapeutic immunoglobulins.

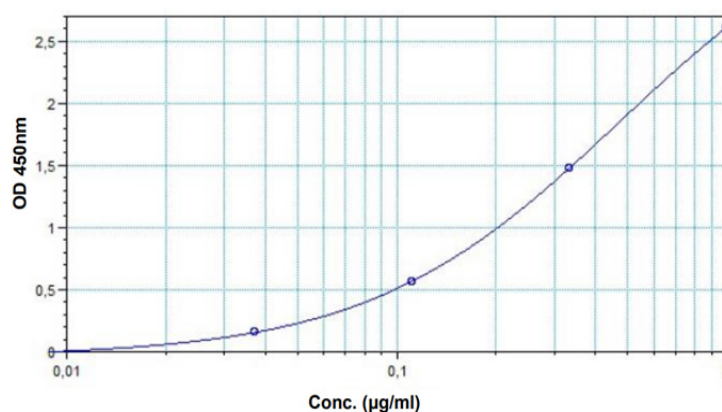
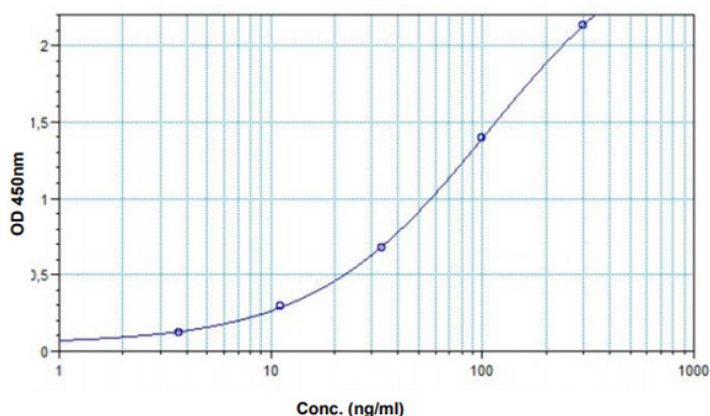


Figure: Typical Standard Curve for BioSim™ Rituximab (Mabthera®) (Human) ELISA Kit (**Cat.No. E4371**) (Left) and BioSim™ Bevacizumab (Avastin®) (Human) ELISA Kit (**Cat. No. E4373**) (Right).

BioSim™ ELISA Kits for Biosimilar Antibodies

Product Name	Trade Name	Cat. No.	Detection Range	Size
BioSim™ Adalimumab ELISA Kit	Humira	E4372	30 - 1000	100 Assays
BioSim™ Avelumab ELISA Kit	Bavencio	E4556	100 - 3000	100 Assays
BioSim™ Bevacizumab ELISA Kit	Avastin	E4373	30 - 1000	100 Assays
BioSim™ Certolizumab pegol ELISA Kit	Cimzia	E4699	12 - 1000	96 Assays
BioSim™ Cetuximab ELISA Kit	Erbitux	E4379	100 - 3000	100 Assays
BioSim™ Denosumab ELISA Kit	Prolia	E4380	100 - 3000	100 Assays
BioSim™ Etanercept ELISA Kit	Enbrel	E4374	100 - 3000	100 Assays
BioSim™ Golimumab ELISA Kit	Simponi	E4377	11 - 300	100 Assays
BioSim™ Infliximab ELISA Kit	Remicade	E4375	100 - 3000	100 Assays
BioSim™ Infliximab ELISA Kit	Remsima	E4378	100 - 3000	100 Assays
BioSim™ Ipilimumab ELISA Kit	Yervoy	E4384	10 - 1000	100 Assays
BioSim™ Nivolumab ELISA Kit	Opdivo	E4382	30 - 3000	100 Assays
BioSim™ Omalizumab ELISA Kit	Xolair	E4381	10 - 1000	100 Assays
BioSim™ Pembrolizumab ELISA Kit	Keytruda	E4383	30 - 1000	100 Assays
BioSim™ Ramucirumab ELISA Kit	Cyramza	E4698	20 - 600	96 Assays
BioSim™ Rituximab ELISA Kit	Mabthera	E4371	3 - 300	100 Assays
BioSim™ Trastuzumab ELISA Kit	Herceptin	E4376	11 - 300	100 Assays

Product Name	Trade Name	Cat. No.	Detection Range	Size
BioSim™ Ustekinumab ELISA Kit	Stelara	E4695	3 - 100	96 Assays
BioSim™ Vedolizumab ELISA Kit	Entyvio	E4697	30 - 1000	96 Assays

BioSim™ ELISA Kits for Anti-Drug Antibodies

Anti-drug antibodies cause unwanted immunogenicity and suppress the therapeutic effects of the treatment and, in rare cases, induce adverse effects. Detecting and monitoring the level of anti-drug antibodies is important when studying adverse drug reactions. BioSim™ ELISA kits are designed to detect or quantify antibodies against biosimilar antibodies in human serum and plasma.

Key Features:

- **Ready to use**
- **Rapid and Simple:** No expensive equipment or special handling/disposal required
- **Accurate:** Reproducible results with low intra & inter assay variability
- **Highly Sensitive and Specific**

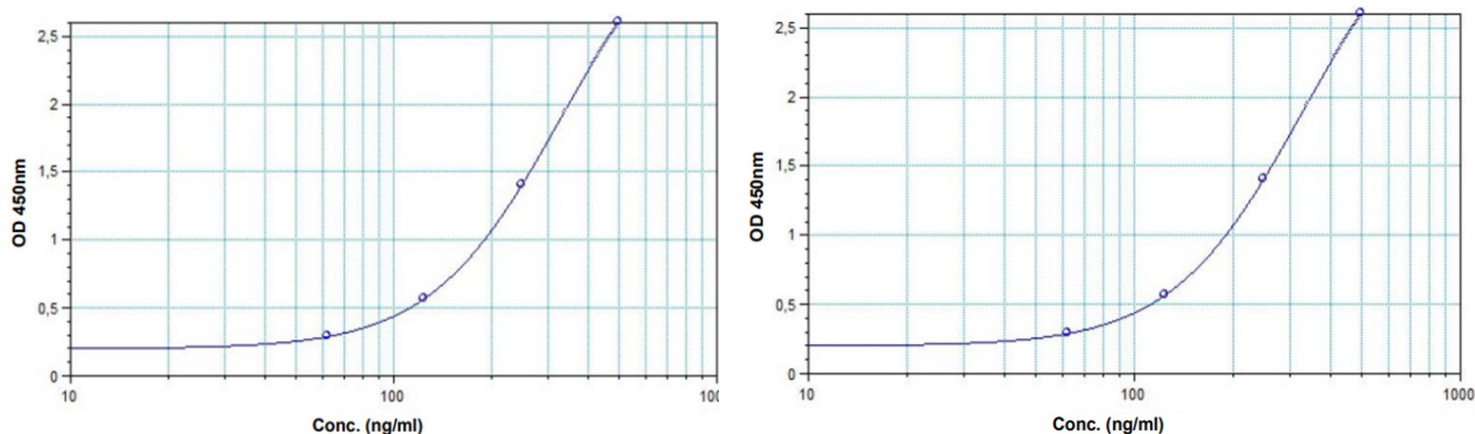


Figure: Typical Standard Curve for BioSim™ anti-Trastuzumab (Herceptin®) (Human) ELISA Kit (Cat.No. E4386) (Left) and BioSim™ anti-Adalimumab (Humira®) (Human) ELISA Kit (Cat. No. E4388) (Right).

BioSim™ ELISA Kits for Anti-Drug-Antibodies

Product Name	Trade Name	Cat. No.	Detection Range	Size
BioSim™ anti-Adalimumab ELISA Kit	Humira	E4388	Human	100 Assays
BioSim™ anti-Bevacizumab ELISA Kit	Avastin	E4389	Human	100 Assays
BioSim™ anti-Cetuximab ELISA Kit	Erbitux	E4391	Human	100 Assays
BioSim™ anti-Denosumab ELISA Kit	Prolia	E4394	Human	100 Assays
BioSim™ anti-Etanercept ELISA Kit	Enbrel	E4392	Human	100 Assays
BioSim™ anti-Filgrastim ELISA Kit	Neupogen	E4399	Human	100 Assays
BioSim™ anti-Golimimumab ELISA Kit	Simponi	E4393	Human	100 Assays
BioSim™ anti-Infliximab ELISA Kit	Remicade	E4387	Human	100 Assays
BioSim™ anti-Infliximab ELISA Kit	Remsima	E4390	Human	100 Assays
BioSim™ anti-Ipilimumab ELISA Kit	Yervoy	E4398	Human	100 Assays
BioSim™ anti-Nivolumab ELISA Kit	Opdivo	E4396	Human	100 Assays
BioSim™ anti-Omalizumab ELISA Kit	Xolair	E4395	Human	100 Assays
BioSim™ anti-Pembrolizumab ELISA Kit	Keytruda	E4397	Human	100 Assays
BioSim™ anti-Rituximab ELISA Kit	Mabthera	E4385	Human	100 Assays
BioSim™ anti-Trastuzumab ELISA Kit	Herceptin	E4386	Human	100 Assays

Please visit www.BioVision.com for a comprehensive overview on our products!