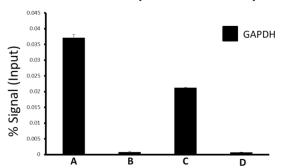




Go-ChIP-Grade™ Protein G Enzymatic Kit

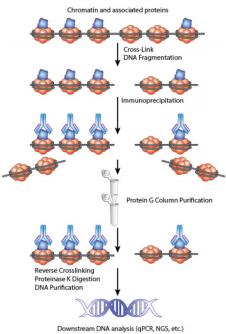
BioLegend is proud to introduce the Go-ChIP-Grade™ Protein G Enzymatic Kit that provides a quicker, easier, and more efficient way of performing Chromatin Immunoprecipitation (ChIP) assays. The kit offers all of the major components required from chromatin sample preparation to immunoprecipitation (IP), protein-DNA complex purification, reverse-crosslinking, and DNA purification. The kit is based on the solid state technology from Chromatrap® that allows high-throughput screening from small cell numbers and low chromatin concentrations. The columns used in the kit contain discs of an inert, porous polymer to which Protein G has been covalently bound to maximize the capture efficiency of the target chromatin/antibody complex.

Anti-RNA Polymerase II Antibody



ChIP was performed using Go-ChIP-Grade™ Protein G Enzymatic Kit by loading 3 µg of crosslinked chromatin samples from HeLa cells with either A) 1:300 dilution of Go-ChIP-Grade™ Purified anti-RNA Polymerase II Antibody (Clone 8WG16), B) equal amount of Purified Mouse IgG2a Isotype Control Antibody, or C) competitor's ChIP-grade Purified anti-RNA Polymerase II Antibody and D) equal amount of matched Isotype Control Antibody as recommended by the manufacturer. The enriched DNA was purified and quantified by real-time qPCR using primers targeting human GAPDH gene region. The amount of IP'ed DNA in each sample is represented as signal relative to the 5% of total amount of input chromatin.

Principle of the ChIP assay



Advantages of the Kit

- Compatible for use with ChIP-qPCR, ChIP-on-chip, and ChIP-seq.
- Suitable for ChIP assays from as little as 1 μ g, to up to 50 μ g of chromatin.
- ChIP assay can be completed in 1-2 days.
- The polymer disc is inert, reducing nonspecific binding.
- Provides reduced IP incubation times.
- Elution chemistry is optimized for high quality and quantity of IP'ed DNA. Sensitive and provides selective enrichment of low chromatin loading.

Description	Size	Cat. No.
Go-ChIP-Grade™ Protein G Enzymatic Kit	6 columns	699904

Learn more at: biolegend.com/chip

Come and Meet Us!

January 27-30, 2018

Midwinter Conference of Immunologists

Pacific Grove, CA

February 14-18, 2018

Translational Research Cancer Centers Consortium

Seven Springs, PA

March 14-17, 2018 WIRM 2018 Dayos, Switzerland

March 21-26, 2018

ThymOz International Workshop on T Lymphocytes Heron Island, Australia

Talkin' Immunology Podcast

In our latest podcast, we speak with a special guest, Dr. Vijay Kuchroo, covering cancer research, innate lymphoid cells, and the integration of immune cells into multiple systems.



Listen to the podcast: biolegend.com/podcast



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BioLegend | Star Products

Neuroscience Spotlight

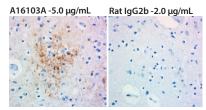
New Tau Antibodies

Tau is a family of neuronal proteins that bind to microtubules and stabilize their formation and maintenance. In the human brain, Tau proteins have 6 isoforms produced by alternative splicing of a single gene called MAPT. Research interest in tau proteins began to grow when tangled forms of these proteins were found to make up the paired helical filaments in brains of Alzheimer's disease (AD) patients. BioLegend has several new purified and conjugated formats of antibodies against Tau, its modifications, and isoforms.

Description	Size	Cat. No.
Biotin anti-Tau, 1-100 Antibody	25 μg 100 μg	816611 816612
Purified anti-Tau, 1-223 Antibody	25 μg 100 μg	851301 851302
Purified anti-Tau, 359-373 Antibody	25 μg 100 μg	851401 851402
Purified anti-Tau, 368-441 Antibody	25 μg 100 μg	851201 851202
Purified anti-Tau, 419-433 Antibody	25 μg 100 μg	851001 851002
Purified anti-Tau, 425-441 Antibody	25 μg 100 μg	851101 851102

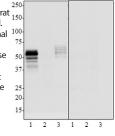
Learn more at: biolegend.com/tau

Purified anti-Tau, 1-223 Antibody



IHC staining of anti-Tau, 1-223 antibody (clone A16103A) and rat IgG2b isotype control on formalin-fixed paraffinembedded Alzheimer's disease brain tissue. Following antigen retrieval using Sodium Citrate, the tissues were incubated with anti-Tau or rat IgG2b at 0.2 µg/mL for 1 hour at room temperature. Biotinylated anti-rat IgG, HRP Streptavidin, and DAB substrate were used as the detection system. Slides were counterstained with hematoxylin.

Western blots of antiTau, 1-223 antibody
(clone A16103A) and rat
IgG2b isotype control.
Lane 1:20 µg of normal
human brain lysate;
Lane 2:20 µg of mouse
brain lysate; Lane 3:
50 ng of recombinant
human Tau ladder. The
blots were incubated
overnight at 4°C with
1 µg/mL of anti-Tau
or rat IgG2b, followed

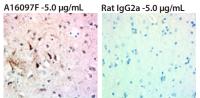


Rat IgG2

A16103A

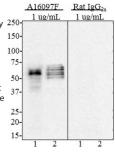
by incubation with horseradish peroxidase labeled goat anti-rat IgG secondary antibody. Enhanced chemiluminescence was used as the detection system

Purified anti-Tau, 368-441 Antibody



IHC staining of anti-Tau, 368-441 antibody (clone A161097F) and rat IgG2a isotype control on formalin-fixed paraffinembedded Alzheimer's disease brain tissue. Following antigen retrieval using Sodium Citrate, the tissues were incubated with 5.0 μ g/mL of anti-Tau or rat IgG2a overnight at 4°C. Biotinylated anti-rat IgG, HRP Streptavidin, and DAB substrate were used as the detection system. Slides were counterstained with hematoxylin.

Western blots of antiTau, 368-441 antibody
(clone A16097F) and
rat IgG2a isotype
control. Lane 1: 20
µg of normal human
brain lysate; Lane 2:
50 ng of recombinant
human Tau ladder. The
blots were incubated
overnight at 4°C with
1µg/mL of anti-Tau
or rat IgG2a, followed
by incubation with



horseradish peroxidase labeled goat anti-rat IgG secondary antibody. Enhanced chemiluminescence was used as the detection system.

New Human LEGENDplex™ Kits

Hematopoietic stem cells (HSCs) give rise to myeloid, erythroid, and lymphoid lineages of cells, which further differentiate into specialized blood cells with the help of cytokines, growth factors, and chemokines. Dysregulation of these lineage-specific markers can lead to a hematological condition. HSCs develop in the bone marrow, where bone metabolism is a complex equilibrium between bone formation (by osteoblasts) and resorption (by osteoclasts). This is regulated through numerous hormones, steroids, growth factors, and cytokines. Disruptions to the homeostasis between formation and resorption results in diseases such as osteoporosis and Paget's disease. As research reveals the importance of these cytokines, our selection of LEGENDplex[™] panels expands to match researchers' needs and analyze multiple cytokines simultaneously in stem cell and bone homeostasis studies.

Human Hematopoietic Stem Cell Panel

Target	Bead ID	Hematopoietic Stem Cell Panel	HSC Lymphoid Panel	HSC Erythroid Panel	HSC Myeloid Panel
IL-6	A4	1	4	*	
M-CSF	B7	✓			✓
IL-15	B6	✓	*		
CXCL12 (SDF1)	B5	✓	*	✓	✓
LIF	B4	✓	*		
SCF	B3	✓	*	*	✓
IL-11	B2	✓	*	*	
IL-34	A10	✓			✓
IL-3	A8	✓	*	✓	1
GM-CSF	A6	✓		*	✓
FLT3L	A5	✓	*		✓
IL-7	B9	✓	*		
Options	Kit with Filter Plates	740610	740612	740614	740616
Options	Kit with V-bottom Plates	740611	740613	740615	740617

Human Bone Metabolism Panel

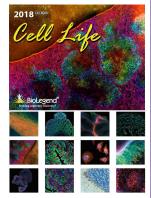
Target	Bead ID	Bone Metabolism	Bone Resorption	Bone Formation
OPG	A4	✓		✓
OPN	A5	1	✓	
ALPL	A7	✓		✓
ACP5	A8	1	✓	
Leptin	A10	✓		✓
RANKL	B2	4	✓	
TNF-α	B3	✓	≠	
IL-6	B4	4	✓	
PTH	B5	✓	✓	
IL-1β	B6	✓	✓	
BMP-2	B7	≠		✓
DKK-1	B9	✓	✓	
Options	Kit with Filter Plates	<u>740655</u>	740674	740672
Options	Kit with V-bottom Plates	740656	740675	740673

Learn more about LEGENDplex™ and watch a full protocol video at: biolegend.com/legendplex

BioLegend | Purple Perks

2018 Cell Life Calendar

Plan out your 2018 with our new Cell Life Calendar. Each image is generated using BioLegend microscopy reagents and features extraordinary and unique staining.



Request your calendar at: biolegend.com/literature/brochures

New Year Promotion

LAB TIMER PROMOTION

Get a complimentary Lab Timer when using promo code TIME18 on orders over \$300 USD. For European orders, value must be over €250 EURO, £250 GBP, or 300 CHF.

Valid for direct end users in USA, Canada, UK, Ireland, Germany, Austria, Switzerland, France, Belgium, Netherlands, and Luxembourg. Promotion and discount codes must be referenced when placing your order. Order must total \$300+ after discounts, before shipping charges. Not valid for distributors or re-sellers. One gift per order, valid until 3/31/18 or while supplies last. Void where prohibited.



View more promotions at: biolegend.com/promotions

BioLegend | New Products Released

Human Flow Cytometry Antibodies

Description	Clone	Format	Applications
BTLA	MIH26	Purified	FC
CD3/CD4/CD8/CD16/CD19/ CD45/CD56	SK7/5.1H11/ B73.1/2D1/ SK3/SJ25C1/ SK1	Cocktail	FC
CD4	A161A1	Biotin, Brilliant Violet 421™	FC
Human CD4Treg Surface ID Panel	A019D5, BC96, UCHT1, A161A1		FC
Human Activated CD8T Cell ID Panel	UCHT1, RPA-T8, BC96, UCHL1		FC
CD9	HI9a	APC	FC
CD11a	HI111	PE/Dazzle™ 594, PerCP/Cy5.5,	FC
CD14	63D3	Alexa Fluor® 488, Alexa Fluor® 647, Brilliant Violet 605™	FC
CD18	m24	APC/Fire™ 750, PE, PerCP/Cy5.5	FC
CD22	HIB22	Alexa Fluor® 700, APC/Fire™ 750	FC
CD33	P67.6	Alexa Fluor® 647, Brilliant Violet 711™	FC
CD36L1	m1B9	APC, PerCP/Cy5.5	FC
CD42b	HIP1	PE/Dazzle™ 594	FC
CD44	BJ18	Pacific Blue™	FC
CD45	2D1	Alexa Fluor® 488, Biotin	FC
CD45	OX-1	Pacific Blue™, PE/Dazzle™ 594	FC
CD47	CC2C6	Brilliant Violet 421™, Brilliant Violet 605™, Pacific Blue™	FC
CD74	Pin.1	PE/Cy7 , PerCP/Cy5.5	ICFC
CD85a (ILT5)	MKT5.1	APC	FC
CD86	BU63	APC, FITC, PE	FC
CD99	3B2/TA8	PE/Cy7, PerCP/Cy5.5	FC
CD107b (LAMP-2)	H4B4	Alexa Fluor® 647, Brilliant Violet 421™	ICFC
CD117 (c-kit)	104D2	Brilliant Violet 650™	FC
CD122	TU27	PE/Dazzle™ 594	FC
CD155 (PVR)	SKII.4	Alexa Fluor® 647, Biotin	FC
CD169	7-239	Brilliant Violet 605™	FC
CD172a	15-414	FITC	FC
CD195 (CCR5)	J418F1	Brilliant Violet 510™	FC
CD209 (DC-SIGN)	9E9A8	APC/Fire™ 750	FC
CD223	11C3C65	Alexa Fluor® 488, Biotin, Brilliant Violet 605™	FC
CD226 (DNAM-1)	11A8	Brilliant Violet 605™, Brilliant Violet 785™, PE/Dazzle™ 594	FC
CD258 (LIGHT)	T5-39	PE/Cy7	FC
CD279	NAT105	Alexa Fluor® 647, Biotin, Brilliant Violet 421™, Brilliant Violet 510™	FC
CD282	W15145C	Purified	FC
CD360	17A12	PE/Cy7	FC
FceRla	AER-37 (CRA-1)	Alexa Fluor® 488	FC
Folate Receptor β	94b/FOLR2	APC, PE	FC
Galectin-9	9M1-3	Alexa Fluor® 647	ICFC, FC
GL7	GL7	Biotin	FC
Granzyme A	CB9	APC, PE/Cy7	ICFC
HLA-A2	BB7.2	Brilliant Violet 421™, Brilliant Violet 785™	FC
HLA-DR	LN3	PerCP/Cy5.5	FC
	1		1

Human Flow Cytometry Antibodies

Description	Clone	Format	Applications
lg light chain λ	1-155-2	Purified	FC
lgG Fc	M1310G05	Biotin, FITC	FC
IL-22	2G12A41	FITC	ICFC
LAP	TW4-2F8	Alexa Fluor® 647	FC
Mac-2 (Galectin-3)	M3/38	APC, PE/Cy7	FC
MERTK	590H11G1E3	APC/Fire™ 750, Biotin	FC
NTAL	W15102A	PE	ICFC
SSEA-3	MC-631	FITC	FC
TCR Vβ8	JR2 (JR.2)	APC	FC
T-bet	4B10	Brilliant Violet 785™	ICFC
Vβ13.1	H131	PE/Cy7	FC

Mouse Flow Cytometry Antibodies

Specificity	Clone	Format	Applications
β2-microglobulin	A16041A	APC, PE	FC
CD1d (CD1.1, Ly-38)	1B1	PE/Cy7	FC
CD14	Sa14-2	Alexa Fluor® 647, Brilliant Violet 421™, PE/Dazzle™ 594	FC
CD20	SA275A11	Alexa Fluor® 700	FC
CD31	MEC13.3	APC/Fire™ 750	FC
CD34	HM34	PE/Cy7	FC
CD125	DIH37	APC	FC
CD140a	APA5	Brilliant Violet 605™	FC
CD146	ME-9F1	Alexa Fluor® 647, Biotin	FC
CD184	QA16A08	Ultra-LEAF™	FC, Block
CD186	SA051D1	Alexa Fluor® 647, Biotin, Brilliant Violet 711™, PE/Cy7, PE/Dazzle™ 594	FC
CD215	6B4C88	PE, Purified	FC
CD355	11-5/CRTAM	Biotin, PE/Cy7, PerCP/Cy5.5	FC
CX3CR1	QA16A03	Ultra-LEAF™	FC, Block
Folate Receptor β	10/FR2	APC, PE	FC
FR4 (Folate Receptor 4)	12A5	APC/Fire™ 750, PE/Dazzle™ 594, PerCP/ Cy5.5	FC
GL7	GL7	Biotin	FC
GM-CSF	MP1-22E9	APC, PE/Cy7	ICFC
H-2Kb	AF6-88.5	PE/Cy7	FC
I-Ab	AF6-120.1	APC/Fire™ 750	FC
lgG2a	RMG2a-62	Alexa Fluor® 488, APC/Fire™ 750	FC
LAP (TGF-β1)	TW7-16B4	FITC	FC
Mac-2 (Galectin-3)	M3/38	APC, PE/Cy7	FC
P2X7R	1F11	PE/Cy7	FC
Perforin	S16009A	APC, PE	ICFC
Perforin	S16009B	APC, PE, Purified	ICFC
SSEA-3	MC-631	FITC	FC
STAT3 Phospho (Ser727)	A16089B	PE	ICFC
TNF-α	TN3-19.12	APC	ICFC
VISTA	MIH63	Biotin	FC
TCR Va2	B20.1	PE/Cy7	FC
ZAP-70	A16043B	Alexa Fluor® 647	ICFC

Rat Flow Cytometry Antibodies

Description	Clone	Format	Applications
Siglec E	M1304A01	FITC	FC
TNF-α	TN3-19.12	APC	ICFC





BioLegend | New Products Released

LEGENDplex™ Products

Description	Applications
Buffer Set H	Multiplex
Human Hematopoietic Stem Cell Panel (12-plex) with Filter Plate	Multiplex
Human Hematopoietic Stem Cell Panel (12-plex) with V-bottom Plate	Multiplex
Human HSC Lymphoid Panel (9-plex) with Filter Plate	Multiplex
Human HSC Lymphoid Panel (9-plex) with V-bottom Plate	Multiplex
Human HSC Erythroid Panel (6-plex) with Filter Plate	Multiplex
Human HSC Erythroid Panel (6-plex) with V-bottom Plate	Multiplex
Human HSC Myeloid Panel (7-plex) with Filter Plate	Multiplex
Human HSC Myeloid Panel (7-plex) with V-bottom Plate	Multiplex
Human Bone Metabolism Panel 1 (12-plex) with Filter Plate	Multiplex
Human Bone Metabolism Panel 1 (12-plex) with V-bottom Plate	Multiplex
Human Bone Resorption Panel (8-plex) with Filter Plate	Multiplex
Human Bone Resorption Panel (8-plex) with V-bottom Plate	Multiplex
Human Bone Formation Panel (4-plex) with Filter Plate	Multiplex
Human Bone Formation Panel (4-plex) with V-bottom Plate	Multiplex

Human Recombinant Proteins

Description	Format	Applications
ALCAM/CD166	Recombinant	BA
CD6	Recombinant	BA
ICAM-2	Recombinant	BA
Serpin E2	Recombinant	BA
TIGIT-Fc Chimera	Recombinant	BA

Mouse Recombinant Proteins

Description	Format	Applications
BMPR1A/ALK-3-Fc Chimera	Recombinant	BA
PDGFRβ	Recombinant	BA
TRANCE	Recombinant	BA

Microscopy Products

Specificity	Clone	Format	Applications
ATF7	W16152A	Alexa Fluor® 594	IF
Cadherin 11	16G5	Alexa Fluor® 647	IHC-P
CD107b (LAMP-2)	H4B4	Alexa Fluor® 594	IHC-P
с-Мус	9E10	Alexa Fluor® 594	IF
Cytokeratin 7	W16155A	Alexa Fluor® 594	IF
Cytokeratin 17	W16131A	Alexa Fluor® 594	IF
Galectin-9	9M1-3	Alexa Fluor® 594	IHC-P
ΙκΒ-α	3D6C02	Alexa Fluor® 647	IF
Keratin 5	Poly9059	Purified	IHC-P
Ki-67	11F6	Alexa Fluor® 594	IHC-F
Rat IgG1	MRG1-58	Alexa Fluor® 594	IHC-F
Rat IgG2b	MRG2b-85	Alexa Fluor® 488, Alexa Fluor® 647	IHC-F
Lypd8	SA025A4	Alexa Fluor® 594, Alexa Fluor® 647	IHC-F
Lypd8	SA024B4	Alexa Fluor® 594, Alexa Fluor® 647	IHC-F
MAP2	SMI 52	Alexa Fluor® 594	IHC-P
NR1D2	W15136A	Alexa Fluor® 594	IF
PARP	5A5	Alexa Fluor® 647	IF, IHC-P

Alexa Fluor* and Pacific Blue* $^{\mathtt{m}}$ are registered trademarks of Life Technologies Corporation.

Brilliant Violet™ is a trademark of Sirigen Group Ltd.

Chromatrap® Technology: This patented format is unique and has been granted in the UK (Patent No. GB2482209), the US (Patent No. 9523681), China (Patent No. ZL 2011 8 0067254.X) Japan (Patent No. JP 6088434) and Australia (Patent No. AU 2011340263).

Go-ChIP-Grade™ Products

Description	Clone	Format	Applications
Bcl-6	IG191E/A8	Go-ChIP-Grade™ Purified	ChIP, WB, IHC-P, IP
Ikaros	16B5C71	Go-ChIP-Grade™ Purified	ChIP, WB
IRF3	12A4A35	Go-ChIP-Grade™ Purified	ChIP, WB, IF
IRF9	5A3A39	Go-ChIP-Grade™ Purified	ChIP, WB, IF
NFATc1	7A6	Go-ChIP-Grade™ Purified	ChIP, WB, ICC, ICFC
Spt16 (FACT140 complex)	8D2	Go-ChIP-Grade™ Purified	ChIP, ICC, WB
STAT2	W15088A	Go-ChIP-Grade™ Purified	ChIP, WB
Protein G Enzymatic Kit		Go-ChIP-Grade™ Purified	ChIP

Isotype Controls

Specificity	Clone	Format	Applications
Syrian Hamster IgG, Isotype Ctrl	SHG-1	PE/Dazzle™ 594	FC, ICFC
Human IgG1, Isotype Ctrl	QA16A12	APC, FITC, PE	FC
Human IgG2, Isotype Ctrl	QA16A13	FITC, PE	FC
Human IgG4, Isotype ctrl	QA16A15	APC, FITC, PE	FC
Mouse IgG2b, κ Isotype Ctrl	27-35	APC/Cy7, FITC	FC
Mouse IgM, κ Isotype Ctrl	MM-30	PE/Cy7	FC

Human ELISA Products

Description	Clone	Format	Applications
CCL20	L2412F11	Purified	ELISA Capture
CCL20	L2418G3	Biotin	ELISA Detection

Neuroscience Products

Specificity	Clone	Format	Applications
α-Synuclein Phospho (Ser12)	P-syn/81A	Alexa Fluor® 594	IHC-P, IHC-F, WB
β-Amyloid, 17-24	4G8	Alexa Fluor® 488, Alexa Fluor® 594, Alexa Fluor® 647	IHC-P
Connexin 43	2F5	Purified	WB, IHC-P
DJ-1	A16125E	Purified	WB, Direct ELISA, IHC-P
SNAP-25	SMI 81	Biotin	WB, IHC-P, EM, FC, IF, IP
Tau, 1-100	43D	Alexa Fluor® 488, Alexa Fluor® 647, Biotin	WB, IHC-P, IHC, WB
Tau, 1-223	A16103A	Purified	WB, Direct ELISA, IHC-P
Tau, 359-373	A16097B	Purified	WB, Direct ELISA, IHC-P
Tau, 368-441	A16097F	Purified	WB, Direct ELISA, IHC-P
Tau, 419-433	A16097D	Purified	WB, Direct ELISA, IHC-P
Tau, 425-441	A16097E	Purified	WB, Direct ELISA, IHC-P
Tubulin β 3 (TUBB3)	TUJ1	Biotin	WB, IHC-P, FC, IF

Western Blot Antibodies

Specificity	Clone	Format	Applications
E. coli RNA Polymerase Antibody Sampler Kit			WB
β-actin	W16197A	Purified	WB
BTK Phospho (Tyr223)/ITK Phospho (Tyr180)	A16128C	Purified	WB, ICFC
His Tag	J095G46	Alexa Fluor® 647, Purified	WB, IF
RUNX1	W16118A	Purified	WB
SIRT2	W16205A	Purified	WB
Stx2A	1C6A6G9	Purified	WB
Tata Rinding Protein	1TBP18	Purified	WB



BioLegend products are manufactured in an ISO 13485:2003 certified facility following GMP compliant procedures, ensuring the highest quality and stability.

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