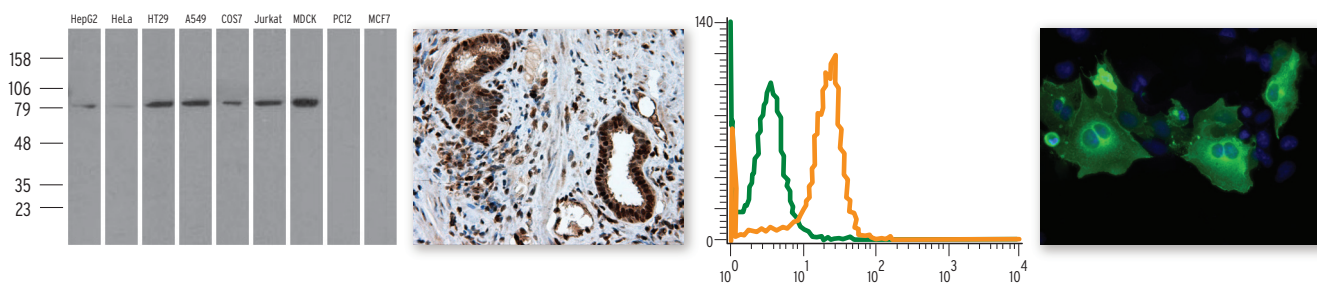


High Quality Primary Antibodies from OriGene

OriGene offers a broad selection of monoclonal and polyclonal antibodies to human proteins for various immuno-detections.

- 10,000 primary antibodies target critical proteins covering various pathways.
- TrueMAB™ monoclonal antibodies are superior at recognizing native protein epitopes. Made against authentic protein antigens with extensive validation data.
- More than 200 new TrueMAB™s added monthly with **30% off for monthly new-releases**.
- Include a free positive control when the matched over-expression cell lysate is available.
- Money back guarantee for validated applications.
- Anti-tag antibodies for the high sensitivity and specificity detection of recombinant proteins, including anti-DDK (anti-FLAG®)*, anti-turboGFP, anti-eGFP, anti-eYFP and more.



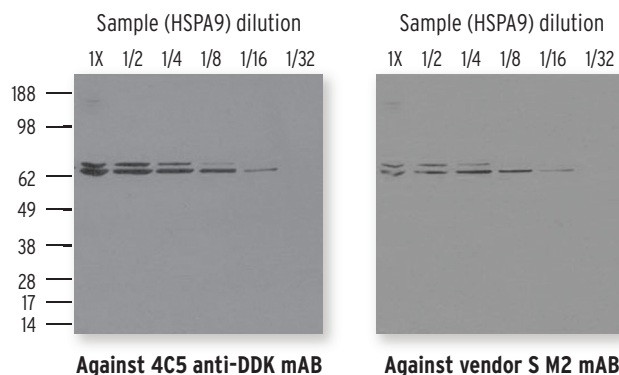
4C5 ANTI-DDK MONOCLONAL ANTIBODY

OriGene has developed 4C5 anti-DDK antibody for the detection of DYKDDDDK epitope (same epitope as FLAG®)* of recombinant proteins.

- Validated for Western blot, immunoprecipitation, immunofluorescence and flow cytometry
- Higher sensitivity and specificity compared to other vendors' anti-FLAG®* antibodies

4C5 anti-DDK monoclonal antibody (TA50011) showed higher sensitivity in the side-by-side comparison

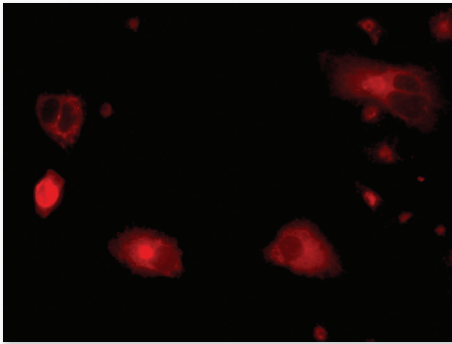
with M2 monoclonal antibody from vendor S. Both antibodies were used at 1:2000 dilution against same sample (HSPA9) dilutions.



* FLAG® is a trademark of Sigma-Aldrich.

2H8 ANTI-tGFP MONOCLONAL ANTIBODY

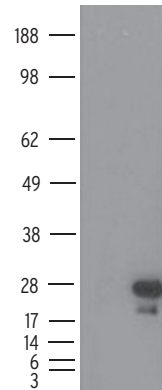
The 2H8 anti-tGFP (turbo green fluorescent protein) monoclonal antibody has been developed for the detection of tGFP tag fused to the N- or C-terminus of recombinant proteins. Validated for Western blot and immunofluorescent staining with high specificity and sensitivity. Made against a tGFP tagged recombinant protein expressed in HEK293T cell.



Cos7 cells transiently transfected with turboGFP tagged LAMP1 ORF cDNA clone were immuno-stained with 2H8 anti-turboGFP antibody (TA500041 - 1:100) and then stained red with an Alexa-568 conjugated secondary antibody (1:1000).

5A2 ANTI-eGFP MONOCLONAL ANTIBODY

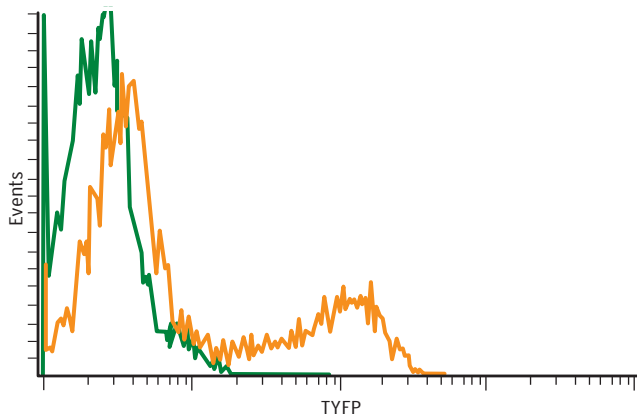
The 5A2 anti-eGFP (enhanced green fluorescent protein) monoclonal antibody has been developed for the detection of eGFP tag fused to the N- or C-terminus of recombinant proteins. Validated for Western blot with high specificity and sensitivity. Made against an eGFP tagged recombinant protein expressed in HEK293T cell.



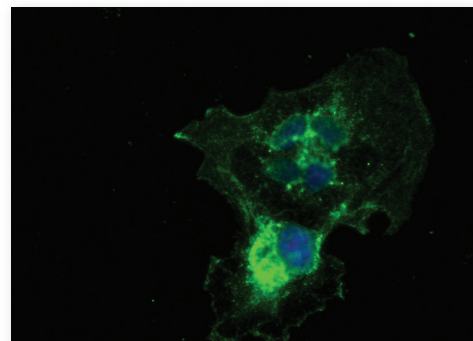
HEK293T cells were transfected with the pCMV6-ENTRY control (left lane) or pCMV6-ENTRY eGFP (right lane) cDNA and lysed, then immunoblotted with 5A2 anti-eGFP monoclonal antibody (TA50052).

10F11 & 14C4 ANTI-tYFP MONOCLONAL ANTIBODY

The 10F11 and 14C4 anti-tYFP (turbo-yellow fluorescent protein) monoclonal antibody has been developed for the detection of tYFP tag fused to the N- or C-terminus of recombinant proteins. Validated for Western blot, immunofluorescent staining and flow cytometry with high specificity and sensitivity. Made against a full length tYFP protein expressed in HEK293T cell.



HEK293T cells were transfected with either pCMV6-ENTRY tYFP (pcmv6-tYFP) (Orange) or empty vector control plasmid (Green) were immunostained with anti-tYFP mouse monoclonal antibody (TA150028), and then analyzed by flow cytometry.



Anti-tYFP mouse monoclonal antibody (TA150027) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY tYFP (pcmv6-tYFP)

TrueMAB™ Monoclonal Antibodies

Made against authentic protein antigens



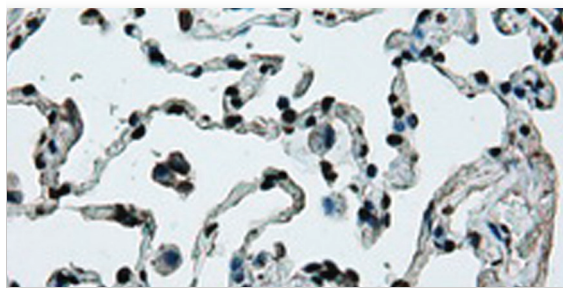
TrueMAB™ antibodies are great tools for immunoassays that are sensitive to proteins' conformations, such as immunofluorescence, immunoprecipitation, flow cytometry, ELISA, immunohistochemistry, high content screening (HCS), antibody arrays and more.

- Superior monoclonal antibodies made to recognize native protein epitopes
- Made against authentic protein antigens
- Extensive validation
 - Western blot on cell lysates (9 cell lines with a positive control)
 - Immunohistochemistry on 24 human normal and tumor FFPE tissues
 - Immunofluorescent staining
 - Flow cytometry
 - Immuno-precipitation
- Includes a free positive control
- Multiple TrueMAB™ monoclonal antibodies available for a single protein target for cross-reference validations

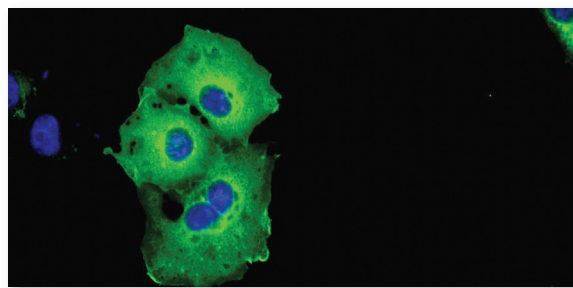
**More than 200
new TrueMAB™
added monthly**



Nominate your favorite human protein antigen(s) for TrueMAB™ monoclonal antibody collection at www.origene.com/antibody/TrueMAB or by sending emails to antibody@origene.com.



Immunohistochemical staining of paraffin-embedded lung tissue using anti-ERCC1 mouse monoclonal antibody. (TA500622, Dilution 1:50)



Anti-SHC1 mouse monoclonal antibody (TA501074) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY SHC1 (RC204362).

TrueMAB™ Monoclonal Antibodies

For the recognition of the native protein epitopes

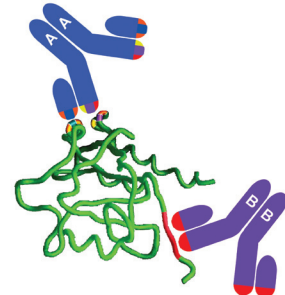
TrueMAB™ monoclonal antibodies were generated using recombinant human proteins as antigens that were affinity purified under native condition to preserve the proteins' conformations. Commonly available commercial antibodies were generated using short peptides. The peptide antigens are inadequate to mimic the protein conformations due to the lack of three-dimensional structures. In particular, peptide-derived antibodies cannot recognize the conformational epitopes which are primarily presented on the surface of native proteins.

In comparison to peptide-derived antibodies, TrueMAB™ monoclonal antibodies provide high sensitivity and specificity for the recognition of native protein epitope's conformational structures.

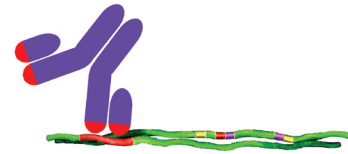
NATIVE EPITOPES

Two types of epitopes are presented on the surface of native protein conformations. A. Conformational epitope (discontinuous epitope); B. Linear epitope. Conformational epitopes are abundant on the surfaces of native proteins. The peptide antigens are inadequate to mimic the protein conformations due to the lack of three-dimensional structures.

Native Epitope (IF, ELISA, FC, IP, HCS)



Denaturated Proteins (Western Blot)



Applicatons	Proteins' Conformations in the Samples	Epitope Recognition
Western Blot	Denatured Proteins	Unfolded Linear Epitopes
Immunofluorescent Staining	Native Folded Proteins	Native Epitopes
Flow Cytometry	Native Folded Proteins	Native Epitopes
Immuno-Precipitation	Native Folded Proteins	Native Epitopes
ELISA	Native Folded Proteins	Native Epitopes
High Content Screening	Native Folded Proteins	Native Epitopes
Antibody Array	Native Folded Proteins	Native Epitopes
Luminex Multiplexing	Native Folded Proteins	Native Epitopes
Immunohistochemistry	Native/Partially Unfolded Proteins (fixed & cross linked)	Conformational & Linear Epitopes

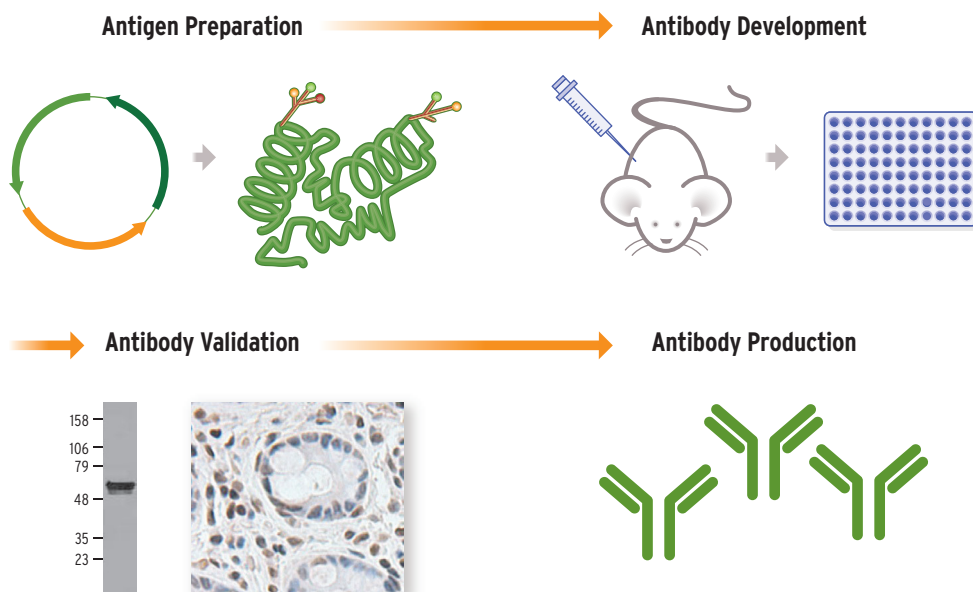
Monoclonal Antibody Development

(TrueMAB™ joint-development program for human proteome)



OriGene provides joint-development programs to generate mouse monoclonal antibodies using human proteins as antigens. Upon the acceptance of the request after OriGene's evaluation, the participant contributes a portion of the development cost, and OriGene will be responsible for:

- Antigen preparation (purified human proteins expressed in HEK293T cells)
- Mouse monoclonal antibody development
- Antibody validations (WB on a panel of cell lines, IHC on 24 tissues, & IF)
- Antibody production & affinity purification



BENEFITS OF THE PROGRAMS

- Proteins with native conformation will be used as antigens. The protein-derived antibodies recognize native epitopes with high reactivity and specificity compared to peptide-derived antibodies
- Antigens not required, OriGene will prepare the antigens
- OriGene provides extensive characterization data for antibody validation
- OriGene delivers affinity purified antibodies ready for your assays

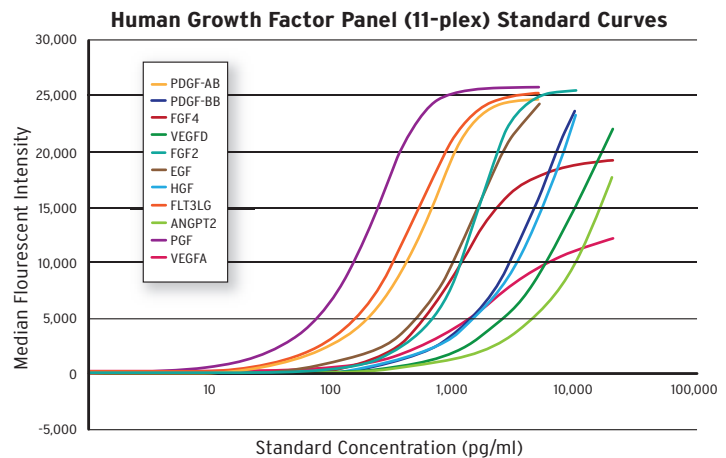
Program cost: inquire at antibody@origene.com

Multiplexed Immunoassays for the Luminex xMAP® Platform

OriGene is committed to developing high quality immunoassay reagents for protein quantitation to support biomarker discovery, validation and confirmation.

TRUEPLEX™ HUMAN GROWTH FACTOR (11-PLEX) ASSAY KIT (AM100096)

The TruePLEX™ human growth factor 11-plex kit is designed for the measurement of 11 different growth factors in cell culture supernatant, human sera, or plasma in conjunction with Luminex xMAP® technology.



IMMUNOASSAY DEVELOPMENT SERVICES

OriGene provides custom multiplexed immunoassay development for Luminex xMAP® technology. OriGene's research and development team possesses extensive development expertise utilizing varied platforms.

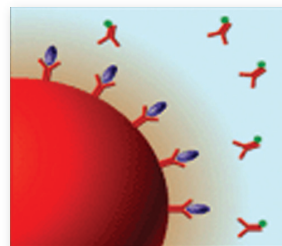
OriGene's Unique Resources for Immunoassay Development Include:

- Capacities to generate new monoclonal antibodies against protein antigens for the recognition of protein's native epitopes.
- A growing inventory of >6,000 authentic full length human proteins as assay standards

FEATURES OF ORIGENE'S MULTIPLEXED IMMUNOASSAYS

- Reduced reagent and labor costs
- Smaller sample requirements per data point
- Fast reaction kinetics provided by the bead array format

Program cost: inquire at assays@origene.com



TrueMAB™



OriGene, Your Partner in Gene Research and Beyond

KEY TECHNOLOGIES AND PRODUCTS

- Full-length cDNA clones, ORF clones in expression-ready vectors
- Gene synthesis: any gene, any variant, any vector
- RNAi research reagents: shRNA, siRNA, and miRNA function and detection
- SYBR Green qPCR assays for mRNA and miRNA detection, primer panels
- Recombinant human proteins and over-expression lysates
- TrueMAB™ monoclonal antibodies
- Luminex multiplex immunoassays
- Cancer tissue biorepository, TMA, RPPA, and TissueScan qPCR arrays
- UltraMAB™ validated IHC antibodies



OriGene USA

9620 Medical Center Drive, Suite 200
Rockville, MD 20850
1.301.340.3188
www.origene.com

OriGene Gene Synthesis

Blue Heron Biotech
22310 20th Avenue SE #100
Bothell, WA 98021 USA
1.425.368.5000
www.blueheronbio.com

OriGene CHINA

HuiLongSen International Science
& Technology Industry Park
Build 11, No.99, Kechuang
Fourteenth Street, D4
Beijing, CHINA 10111
86.10.59755312
www.origene.com.cn/