

# High Quality Primary Antibodies with Extensive Validation

## Antibodies and Immunoassays

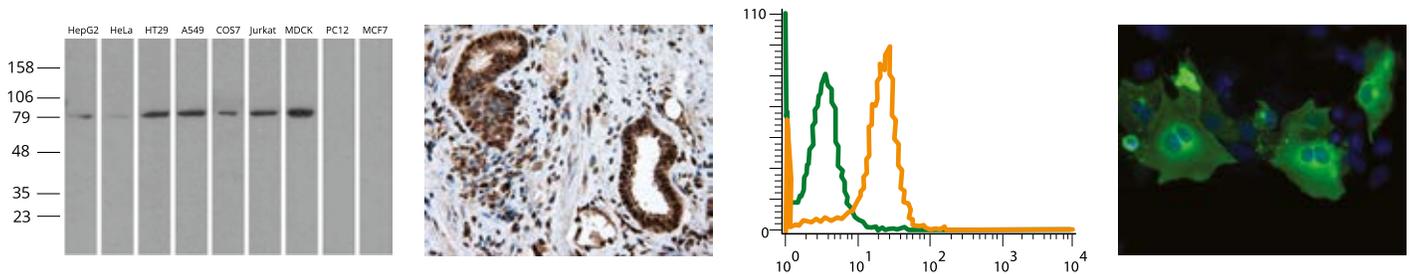
Monoclonal Antibodies made  
against Authentic Proteins  
Rabbit Monoclonal Antibodies  
Immunoassay Kits and Services

 **ORIGENE**  
[www.origene.com](http://www.origene.com)

# High Quality Primary Antibodies from OriGene

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

- 140,000 primary antibodies target critical proteins covering various pathways
- 27,000 OriGene branded antibodies: TrueMAB<sup>®</sup>, UltraMAB<sup>®</sup>, TrueRAB<sup>™</sup> and TrueMAB<sup>™</sup> with extensive validation data and large citations
- 600 Knock Out (KO) validated antibodies covering important immune-oncology targets
- Positive controls are available for most antibodies
- Large selection of anti-tag antibodies include common epitope tags and fluorescent protein tags
- Large selection of loading control antibodies against GAPDH, beta-tubulin, beta-actin and HSP90AB for several species
- Money-back guarantees for validated applications



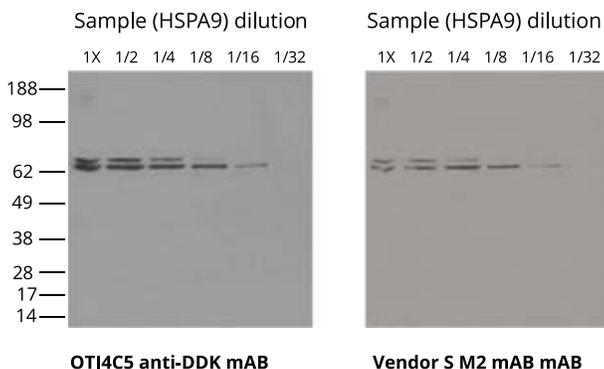
View the complete antibody portfolio at [www.origene.com/antibodies](http://www.origene.com/antibodies)

## OTI4C5 anti-DDK monoclonal Antibody (TA50011)

OriGene has developed the OTI4C5 anti-DDK antibody to detect the DYKDDDDK epitope (same epitope as FLAG<sup>®</sup>)\* of recombinant proteins.

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

OTI4C5 anti-DDK monoclonal antibody (TA50011) showed higher sensitivity in the side-by-side comparison with the M2 monoclonal antibody from vendor S. Both antibodies were used at 1:2000 dilution against the same sample (HSPA9) dilutions.



## NEW Product Available

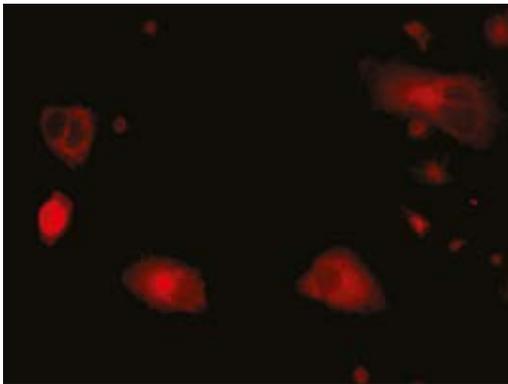
The next-generation OriGene anti-DDK antibody (TA592569)

- More specific, more sensitive
- Recognizing DDK tag at either N or C terminus
- Recombinant Rabbit IgG

\* FLAG<sup>®</sup> is a trademark of Sigma-Aldrich.

## OTI2H8 anti-tGFP monoclonal antibody (TA150041)

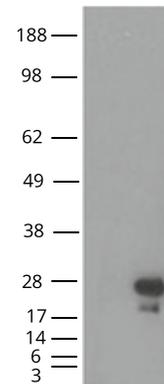
The OTI2H8 anti-tGFP (turbo green fluorescent protein) monoclonal antibody has been developed to detect the tGFP tag fused to the N- or C-terminus of recombinant proteins. Validated for Western blot and immunofluorescent staining with high specificity and sensitivity. Made against a tGFP tagged recombinant protein expressed in HEK293T cell.



Cos7 cells transiently transfected with the turboGFP-tagged LAMP1 ORF cDNA clone were immunostained with OTI2H8 anti-turboGFP antibody (TA150041 - 1:100) and then stained red with an Alexa-568 conjugated secondary antibody (1:1000).

## OTI5A2 anti-eGFP monoclonal antibody (TA150052)

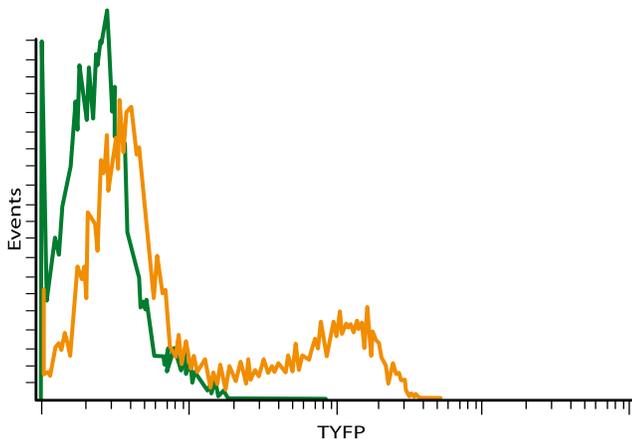
The OTI5A2 anti-eGFP (enhanced green fluorescent protein) monoclonal antibody has been developed for the detection of eGFP tag fused to the N- or C-terminus of recombinant proteins. Validated for Western blot with high specificity and sensitivity. Made against an eGFP tagged recombinant protein expressed in HEK293T cell.



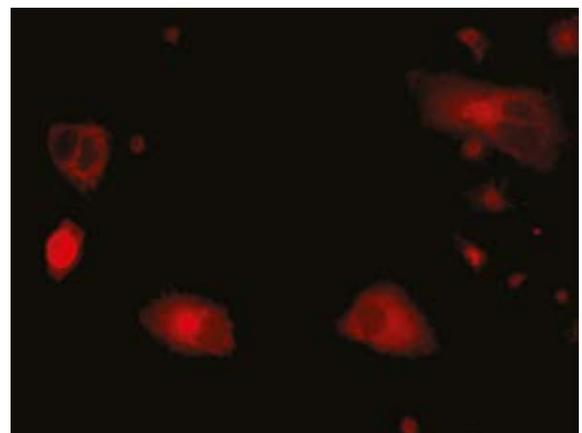
HEK293T cells were transfected with the pCMV6-ENTRY control (left lane) or pCMV6-ENTRY eGFP (right lane) cDNA and lysed, then immunoblotted with OTI5A2 anti-eGFP monoclonal antibody (TA150052).

## OTI10F11 & OTI14C4 anti-tYFP monoclonal antibody (TA150027 & TA150028)

The OTI10F11 and OTI14C4 anti-tYFP (turbo-yellow fluorescent protein) monoclonal antibodies have been developed to detect the tYFP tags 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) and 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

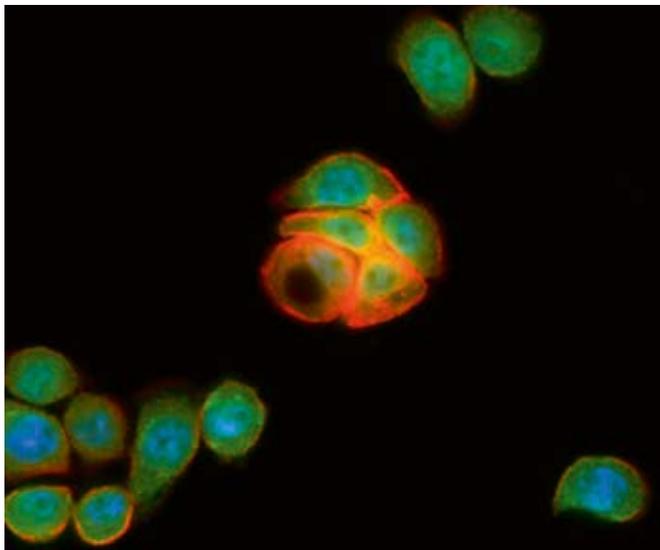
## Made against authentic protein antigens

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.

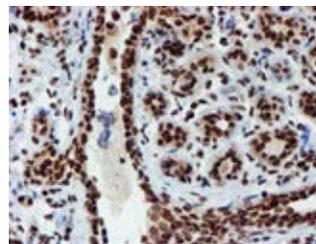
- Superior monoclonal antibodies made to recognize native protein epitopes
- Made against authentic protein antigens
- Extensive validation
  - Western blot on cell lysates (9 cell lines with a positive control)
  - Immunohistochemistry on 24 human normal and tumor FFPE tissues
  - Immunofluorescent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



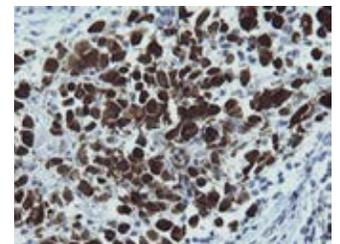
Learn more about our TrueMABs at [www.origene.com/truemab](http://www.origene.com/truemab)



Immunofluorescent staining of HT29 cells using anti-LGR5 mouse monoclonal antibody (TA503316, green). Actin filaments were labeled with TRITC-phalloidin (red), and nuclear with DAPI (blue)



Immunohistochemical staining of paraffin-embedded Human breast tissue within the normal limits using anti-PADI4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100 °C for 10min, TA504813)



Immunohistochemical staining of paraffin-embedded Carcinoma of Human bladder tissue using anti-MAGEA4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120 °C for 3min, TA505362)

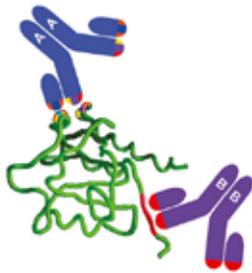
## For the recognition of the native protein epitopes

TrueMAB™ monoclonal antibodies were generated using recombinant human proteins as antigens that were affinity purified under the native condition to preserve the protein 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

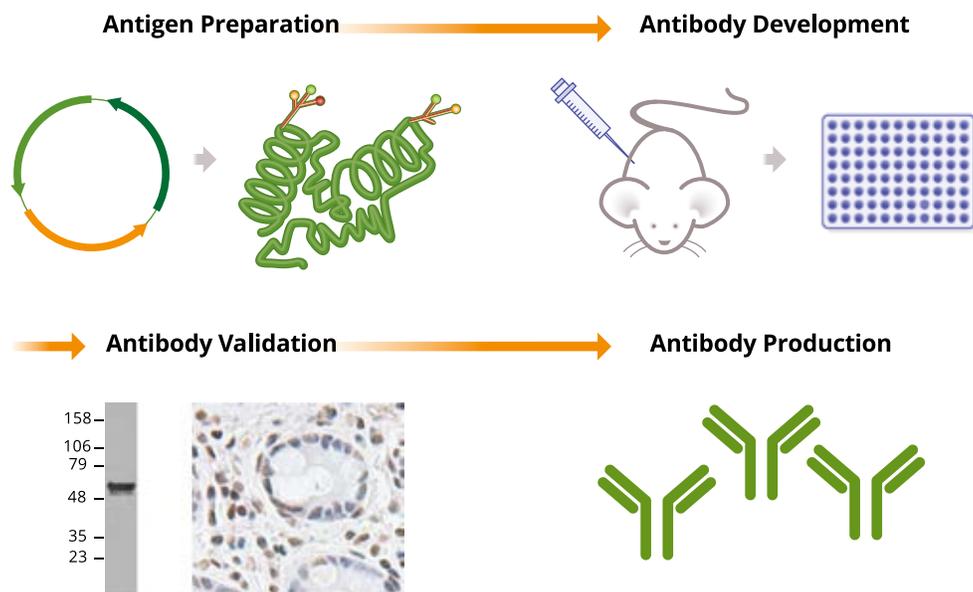
# Monoclonal Antibody Development

## 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 are not required; OriGene will prepare the antigens
- OriGene provides extensive characterization data for antibody validation
- OriGene delivers affinity purified antibodies ready for your assays

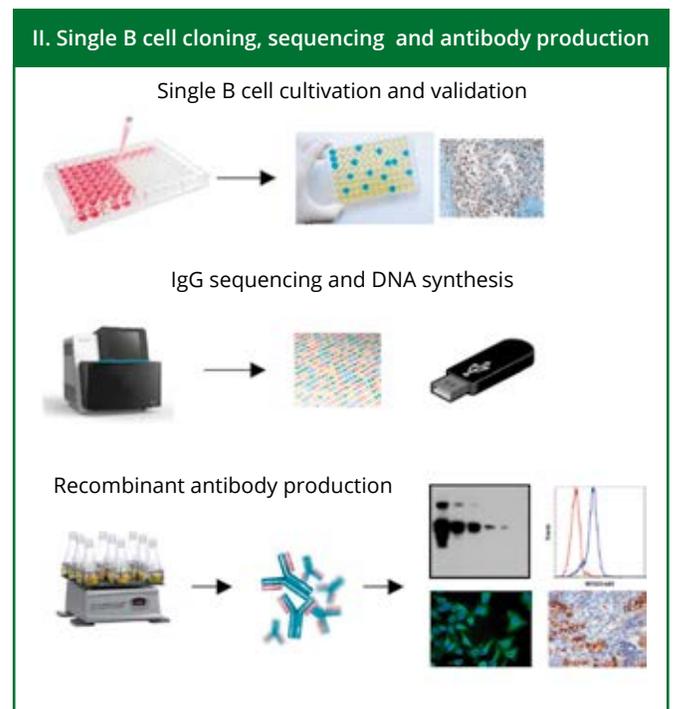
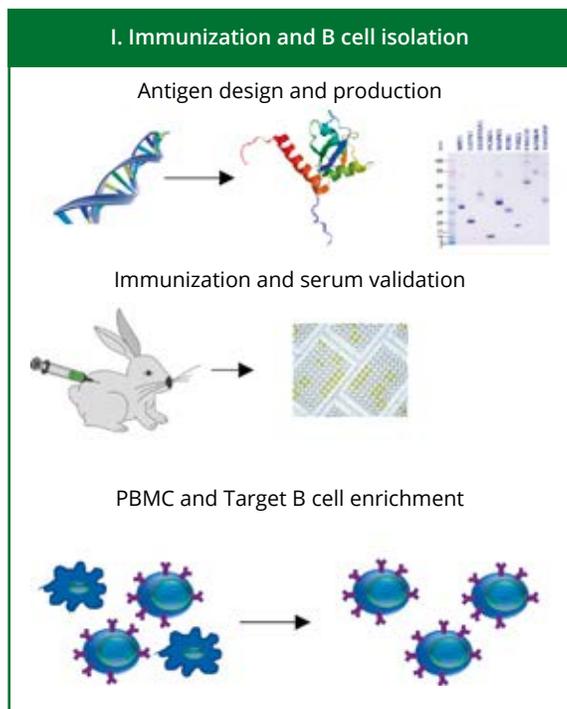
Program cost: inquire at [sales@origene.com](mailto:sales@origene.com)

# TrueRAB™ Recombinant Rabbit Monoclonal Antibodies

OriGene has developed single B cell cloning technology for recombinant rabbit monoclonal antibody generation. TrueRAB® monoclonal antibodies are a collection of recombinant rabbit monoclonal antibodies developed in-house.

## Features:

- Higher affinity and specificity compared to mouse monoclonal antibodies
- Ideal for the development of antibodies against tough targets
- Ideal for mouse model study
- Ideal for demanding applications like IHC on FFPE tissue



View more details on  
[www.origene.com/truerab](http://www.origene.com/truerab)

## **OriGene, Your Partner in Research, Diagnostics and Beyond**

- cDNA Clones/Lenti Particles
- CRISPR/Cas9/sgRNA
- Recombinant Proteins
- Antibodies
- RNAi
- Normal & Cancer Tissues



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