High Quality Primary Antibodies with Extensive Validation

Antibodies and Immunoassays

7000 primary antibodies with free positive controls

Anti-tag antibodies for the detections of recombinant proteins

TrueMAB™ monoclonal antibodies made against authentic protein antigens

Immunoassay kits and services for Luminex xMAP® Platform
High Quality Primary Antibodies from OriGene

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

- 7000 primary antibodies target critical proteins covering various pathways.
- TrueMAB™ monoclonal antibodies: Superior monoclonal antibodies recognize native epitopes of proteins’ conformations. Made against authentic protein antigens (mostly expressed in human cell lines) with extensive validation data. Add more than 200 new TrueMAB™ 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 with low expression levels.

- 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 transfected with turboGFP tagged LAMPI ORF cDNA clone were immuno-stained with 2H8 anti-turboGFP antibody (TA50041).](image1)

**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 immuno-blotted with 5A2 anti-eGFP monoclonal antibody (TA50052).](image2)

**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 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.](image3)

![Anti-tYFP mouse monoclonal antibody (TA150027) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY TYFP (pcmv6-TYFP).](image4)
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 recognize epitopes of proteins’ native conformations
- Made against authentic protein antigens (mostly full-length proteins expressed in human cell lines)
- Extensive validations
  - 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

- Include a free positive control
- Multiple TrueMAB™ monoclonal antibodies available for a single protein target for cross-reference validations

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 epitopes of proteins’ conformations

TrueMAB™ monoclonal antibodies were generated using recombinant human proteins as antigens (mostly full-length proteins expressed in human cell lines) that were affinity purified under native condition to preserve the protein conformations. The 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 epitopes appeared on the protein conformational structures.

NATIVE EPITOPES

The epitopes presented on the surfaces of protein’s native 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.

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www.origene.com/antibody/truemab
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 (human proteins expressed in human cell line with genuine mammalian post-translational modification, purified under native condition)
- 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

www.origene.com/antibody/truemab
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. We are adding more new products to advance proteomic research.

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 and TrueMAB™ monoclonal antibodies
- A growing inventory of 5000 authentic full length human proteins as assay standards for assay accuracy improvement

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 immunoassay@origene.com
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
- TrueMAB™ monoclonal antibodies
- Luminex multiplex immunoassays
- Cancer tissue biorepository, TMA, RPPA, and TissueScan qPCR arrays