Antibody for the detection of FLAG™ conjugated proteins (MOUSE) Monoclonal Antibody - 200-301-B13

Code: 200-301-B13 **Size:** 500 µg

Product Description: Antibody for the detection of FLAG™ conjugated proteins (MOUSE) Monoclonal Antibody - 200-301-B13

Concentration: 1.0 mg/ml by UV absorbance at 280 nm

PhysicalState: Liquid (sterile filtered)

Label	Unconjugated
Host	Mouse
Species Reactivity	Carboxy and amino terminal linked FLAG™ tagged recombinant proteins
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer	None
Preservative	0.01% (w/v) Sodium Azide
Storage Condition	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Synonyms	mouse anti-FLAG™ tag, Enterokinase Cleavage Site (ECS), mouse anti-DYKDDDDK, Asp-Tyr-Lys-Asp-Asp-Asp-Asp-Lys
Application Note	This antibody is optimally suited for monitoring the expression of FLAG™ tagged fusion proteins. As such, this antibody can be used to identify fusion proteins containing the FLAG™ epitope. The antibody recognizes the epitope tag fused to either the amino- or carboxy- termini of targeted proteins. The epitope tag peptide sequence was first derived from the 11-amino-acid leader peptide of the gene-10 product from bacteriophage T7. DYKDDDDK is the most commonly used hydrophilic octapeptide tag.
Background	Epitope tags are short peptide sequences that are easily recognized by tag-specific antibodies. Due to their small size, epitope tags do not affect the tagged protein's biochemical properties. Most often sequences encoding the epitope tag are included with target DNA at the time of cloning to produce fusion proteins containing the epitope tag sequence. This allows anti-epitope tag antibodies to serve as universal detection reagents for any tag containing protein produced by recombinant means. This means that anti-epitope tag antibodies are a useful alternative to generating specific antibodies to identify, immunoprecipitate or immunoaffinity purify a recombinant protein. The anti-epitope tag antibody is usually functional in a variety of antibody-dependent experimental procedures. Expression vectors producing epitope tag fusion proteins are available for a variety of host expression systems including bacteria, yeast, insect and mammalian cells. Rockland Immunochemicals produces anti-epitope tag antibodies against many common epitope tags including Myc, GST, GFP, 6X His, MBP, FLAG™ and HA. Rockland Immunochemicals also produces antibodies to other tags including FITC, Rhodamine (TRITC), DNP and biotin.
Purity And Specificity	This product is an IgG fraction antibody purified from ascites by Protein A chromatography followed by extensive dialysis against the buffer stated above. The purified antibody is directed against the FLAG™ motif and is useful in determining its presence in various assays where the epitope tag is present at either the amino or carboxy terminus of recombinant proteins. This monoclonal anti-FLAG™ tag antibody detects over-expressed proteins containing the FLAG™ epitope tag. In western blotting of bacterial extracts, the antibody does not cross-react with endogenous proteins.
Assay Dilutions	User Optimized
ELISA	1:150,000 - 1:250,000
Western Blot	1:2,000-1:10,000
Immunohistochemistry	1:1,000-1:5,000
Flow Cytometry	User Optimized
Other Assays	User Optimized
Expiration	Expiration date is one (1) year from date of opening.
Immunogen	This antibody was produced in mice by repeated immunizations with a synthetic peptide corresponding to the FLAG™ epitope tag peptide DYKDDDDK (Asp-Tyr-Lys-Asp-Asp-Asp-Asp-Lys) conjugated to KLH using maleimide. Residues of glycine and cysteine were added to the termini to facilitate coupling.

General Reference

Chubet, R.G. and Brizzard, B.L. (1996) Vectors for expression and secretion of FLAG epitope-tagged proteins in mammalian cells. Biotechniques 20(1):136-141.Slootstra, J.W., et al. (1997) Identification of new tag sequences with differential and selective recognition properties for the anti-FLAG monoclonal antibodies M1, M2 and M5. Mol. Divers. 2(3):156-164.Robeva, A.S., et al. (1996) Double tagging recombinant A1- and A2A-adenosine receptors with hexahistidine and the FLAG epitope. Development of an efficient generic protein purification procedure. J. Biochem. Pharmacol. 51(4):545-555.

Specific Reference

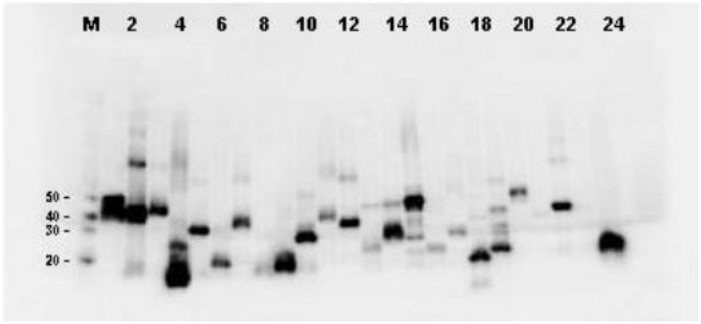
Huang, Y., Chuang, A., Hao, H., Talbot, C., Sen, T., Trink, B., ... & Ratovitski, E. (2011). Phospho-Np63 is a key regulator of the cisplatin-induced microRNAome in cancer cells. Cell Death & Differentiation, 18(7), 1220-1230.

Related Products

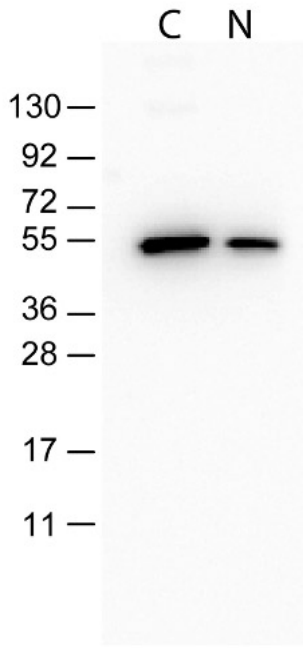
200-301-268	Anti-AKT pS473 (MOUSE) Monoclonal Antibody - 200-301-268
610-4302	Anti-MOUSE IgG (H&L) (RABBIT) Antibody Peroxidase Conjugated - 610-4302
611-1302	Anti-RABBIT IgG (H&L) (GOAT) Antibody Peroxidase Conjugated - 611-1302
B304	NORMAL GOAT SERUM (NGS) - B304

Images

1	Twenty-four (24) clones were randomly selected and grown up from glycerol stocks by inoculating 0.5mL 2xYT medium. Expression of recombinant proteins was induced by the addition of IPTG. Proteins were purified by nickel affinity chromatography and eluted in 40 µL. Samples were diluted 10-fold, transferred to nitrocellulose membrane and blotted using Mab-anti-FLAG™ antibody. Personal Communication: A. Morrison and B. Kloss, NYCOMPS, New York, NY.



2	Monoclonal Antibody to detect FLAG™ conjugated proteins detects both C terminal linked and N terminal linked FLAG™ tagged recombinant proteins by western blot.



Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.