

Datasheet for KBA-319-383**DYKDDDDK (FLAG®) Immunoprecipitation Kit****Overview**

Description:	DYKDDDDK (FLAG®) Immunoprecipitation Kit for immunoprecipitation and purification of recombinant proteins containing the FLAG® epitope tag - KBA-319-383
Item No.:	KBA-319-383
Size:	1 Kit
Applications:	IP, SDS-PAGE

Product Details

Background:	Rockland Immunochemicals' Anti-DYKDDDDK (FLAG®) Kit for Immunoprecipitation allows for the purification by immunoprecipitation of recombinant proteins containing the FLAG® epitope tag provided by the user. The kit relies upon the high specificity of monoclonal antibody raised against the FLAG® epitope tag. This method is far easier and less costly than using antibodies produced against the recombinant protein itself therefore saving time and resources. Using the agarose bound antibody in this kit allows for efficient binding of FLAG® tag proteins without the need for preliminary steps or calibration. The immunoprecipitated FLAG® tag protein can be efficiently eluted from the agarose beads using a low pH elution step. The user is able to further characterize the resultant purified protein by size, post-translational modification, western blot and other assays.
Synonyms:	FLAG® TAG Immunoprecipitation Kit, Immunoprecipitation Kit for FLAG Antibody, DYKDDDDK, Anti-DYKDDDDK IP Kit, IP FLAG Antibody KIT, DDK, FLAG, FLAG antibody, anti-Flag, anti-DDK, DDK antibody
Detection Kit Type:	Immunoprecipitation Kit

Target Details

Purity/Specificity:	This kit contains: anti-FLAG® coupled to agarose; FLAG® positive control lysate; 2X SDS-PAGE Sample Buffer; Neutralization Buffer; 1X Lysis Buffer; 10X Wash Buffer; Elution Buffer; along with additional instructions and supplies (see protocol).
Relevant Links:	• KBA-319-383 SDS • Immunoprecipitation Kit Protocol: FLAG Epitope Tag

Application Details

Tested Applications:	IP, SDS-PAGE
Application Note:	Rockland Immunochemicals' Anti-DYKDDDDK (FLAG®) Kit for Immunoprecipitation is intended to provide a simple, reliable and convenient purification system for recombinant proteins containing the FLAG® epitope tag. Immunoprecipitation is a powerful technique for the isolation of proteins or protein complexes. Immunoprecipitation consists of several steps including cell lysis, binding of specific antigen to an antibody, antibody-antigen complex precipitation, precipitant wash steps and the dissociation of antigen from the complex. The FLAG® epitope tag is a small but highly immunogenic peptide DYKDDDDK (N-Asp-Tyr-Lys-Asp-Asp-Asp-Lys-C), which allows fusion proteins to retain their original conformation and function. The hydrophilic character of FLAG® increases the likelihood that it will be located on the surface of the fusion protein where it is accessible to antibodies. Rockland Immunochemicals' Anti-DYKDDDDK (FLAG®) Kit for Immunoprecipitation allows a rapid and efficient immunoprecipitation and elution of an active FLAG® -tagged recombinant protein in less than 2 hours. The immunoprecipitation is performed with anti-FLAG® antibody coupled to agarose beads, which are generated by covalently linking agarose to a highly specific mouse monoclonal antibody raised against FLAG®. The provided protocol is a guideline. Any procedure can be altered according to specific experimental requirements. This kit is sufficient to perform 50 X 20 µL reactions and is stable for at least 1 year when stored as indicated.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IP:	User Optimized

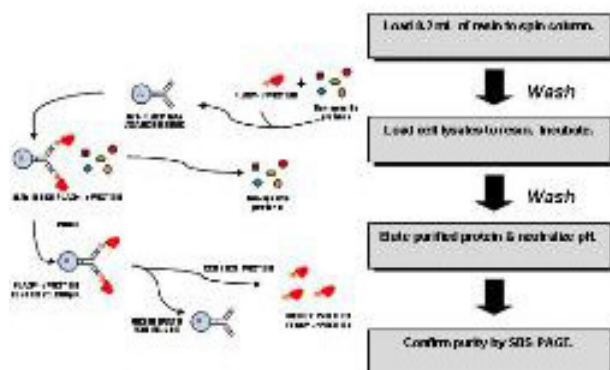
Formulation

Physical State:	n/a
Concentration:	None
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	See kit insert for complete instructions.
Expiration:	See kit insert for complete instructions.

Images



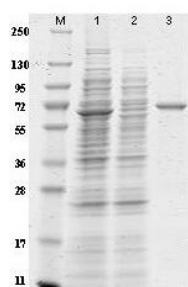
Western Blot

Immunoprecipitation and Flow diagram for Anti-DYKDDDDK (FLAG®) Kit#Antibody binding principles are shown for the Anti-DYKDDDDK (FLAG®) Kit to purify FLAG® - tagged recombinant proteins. The anti-FLAG® antibody bound to agarose beads captures the FLAG® - tagged recombinant protein from solution. After copious washing with PBS, the buffer condition is changed allowing the release and collection of the highly purified recombinant protein.



Kit Box

This product is assembled as a kit. See attached protocol or CofA for further details.



Western Blot

Coomassie stained SDS-PAGE using Anti-DYKDDDDK (FLAG®) Kit for Immunoprecipitation to purify recombinant proteins containing the FLAG® epitope tag from an E.coli cell lysate. Lane 1- cell lysate before immunoprecipitation. Lane 2- cell lysate after immunoprecipitation showing depletion of protein. Lane 3 - purified FLAG® -tagged recombinant protein.

References

- Kulkarni RA et al. A chemoproteomic portrait of the oncometabolite fumarate. *Nat Chem Biol.* (2019)
- Kulkarni, RA et al. Discovering Targets of Non-enzymatic Acylation by Thioester Reactivity Profiling. *Cell Chemical Biology* (2017)

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.