Datasheet for ABIN965408

# DYKDDDDK Tag Immunoprecipitation Kit

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## Overview

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| Quantity: | 1 kit |
| Target: | DYKDDDDK Tag |
| Application: | Immunoprecipitation (IP) |

## Product Details

## Target Details

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| Target: | DYKDDDDK Tag |
| Abstract: | DYKDDDDK Tag Products |
| Target Type: | Tag |
| Background: | Anti-DYKDDDDK Kit for Immunoprecipitation allows for the purification by immunoprecipitation of recombinant proteins containing the DYKDDDDK epitope tag provided by the user. The kit relies upon the high specificity of monoclonal antibody raised against the DYKDDDDK 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 DYKDDDDK tag proteins without the need for preliminary steps or calibration. The immunoprecipitated DYKDDDDK 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.<br>Synonyms: DYKDDDDK Immunoprecipitation Kit, Immunoprecipitation Kit, DYKDDDDK, Anti-DYKDDDDK, IP DYKDDDDK |

## Application Details

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| Application Notes: | Anti-DYKDDDDK Kit for Immunoprecipitation is intended to provide a simple, reliable and convenient purification system for recombinant proteins containing the DYKDDDDK 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 DYKDDDDK epitope tag is a small but highly immunogenic peptide DYKDDDDK (N-Asp-Tyr-Lys-Asp-Asp-Asp-Asp-Lys-C), which allows fusion proteins to retain their original conformation and function. The hydrophilic character of DYKDDDDK increases the likelihood that it will be located on the surface of the fusion protein where it is accessible to antibodies. Anti-DYKDDDDK Kit for Immunoprecipitation allows a rapid and efficient immunoprecipitation and elution of an active DYKDDDDK -tagged recombinant protein in less than 2 hours. The immunoprecipitation is performed with anti-DYKDDDDK® antibody coupled to agarose beads, which are generated by covalently linking agarose to a highly specific mouse monoclonal antibody raised against DYKDDDDK. 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. |
| Comment: | Detection Kit Type: Immunoprecipitation Kit |
| Restrictions: | For Research Use only |

## Handling

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| Storage: | 4 °C/-20 °C |

## Publications

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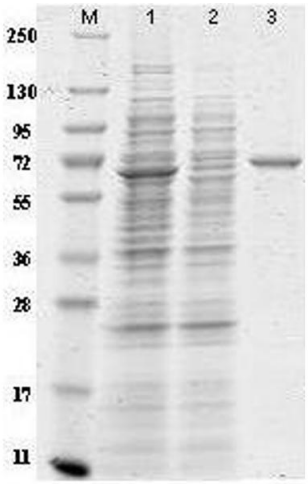
|---|---|
| Product cited in: | Kulkarni, Bak, Wei, Bergholtz, Briney, Shrimp, Alpsoy, Thorpe, Bavari, Crooks, Levy, Florens, Washburn, Frizzell, Dykhuizen, Weerapana, Linehan, Meier: "A chemoproteomic portrait of the oncometabolite fumarate." in: **Nature chemical biology**, Vol. 15, Issue 4, pp. 391-400, (2019) ( PubMed).<br><br>Kulkarni, Worth, Zengeya, Shrimp, Garlick, Roberts, Montgomery, Sourbier, Gibbs, Mesaros, Tsai, Das, Chan, Zhou, Andresson, Weissman, Linehan, Blair, Snyder, Meier: "Discovering Targets of Non-enzymatic Acylation by Thioester Reactivity Profiling." in: **Cell chemical biology**, Vol. 24, Issue 2, pp. 231-242, (2017) (PubMed). |




## Western Blotting

**Image 1.** Coomassie stained SDS-PAGE using Anti-DYKDDDDK (FLAG®) Kit for Immunoprecipitation to purify recombinant proteins containing the 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 -tagged recombinant protein.

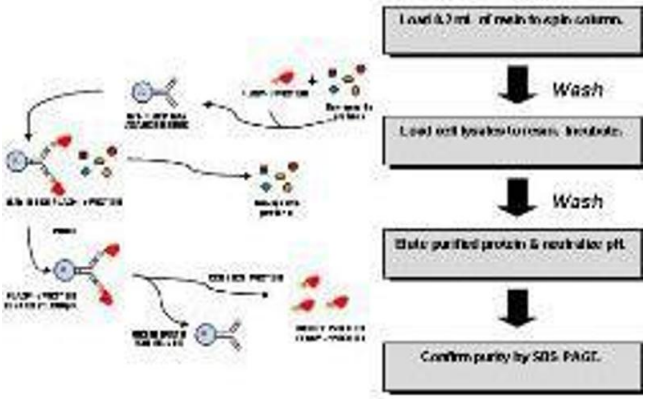



**Image 2.**