ProductInformation

ANTI-INOSITOL HEXAKISPHOSPHATE KINASE
Developed in Rabbit, Affinity Isolated Antibody

Product Number **I 6904**

Product Description

Anti-Inositol Hexakisphosphate Kinase (IP6 kinase) is developed in rabbit using a highly-purified synthetic peptide corresponding to amino acids 216-233 (PCVLDLKMGTRQHGDDAS) of the human IP6 kinase protein conjugated to KLH as the immunogen. This sequence is completely conserved in human, mouse, rat, and rabbit. The antibody is affinity isolated on immobilized immunogen.

Anti-Inositol Hexakisphosphate Kinase specifically recognizes the IP6 kinase protein (50 kDa) from rat brain, testes, and spleen by immunoblotting. This antibody has also been used to detect recombinantly expressed IP6 kinase.

Inositol 1,4,5-trisphosphate (IP3) is a second messenger for many growth factors, hormones and neurotransmitters. Upon binding to the IP3 receptor (IP3R), IP3 triggers the release of Ca^{2+} from intracellular stores. Other physiological forms of IP3 have been discovered. Some of these additional forms possess up to eight phosphate groups and others incorporate pyrophosphate (pyrophosphate-inositol phosphates, PP-IPs) for use in protein phosphorylation.

IP6 kinase has ATP synthase activity, transferring a phosphate from PP-IP5 to ADP to form ATP.[1]

Reagent

Anti-Inositol Hexakisphosphate Kinase is supplied as 100 µg of affinity isolated rabbit antibody in phosphate buffered saline containing 1.0 mg/ml bovine serum albumin and 0.05 % sodium azide.

Precautions and Disclaimer

Due to the sodium azide content, a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazardous and safe handling practices.

Storage/Stability

Store the antibody at –20 °C. Repeated freezing and thawing is not recommended. Storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

The recommended working dilution for immunoblotting is 1:2000.

Note: In order to obtain best results and assay sensitivities of different techniques and preparations, we recommend determining optimal working dilutions by titration test.

References

1. Schell, M. J., et al., FEBS Lett., **461**, 169-172 (1999).

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