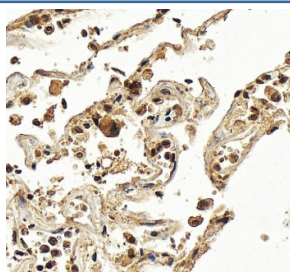


Hexokinase 3 Antibody / HK3 (RQ8926)

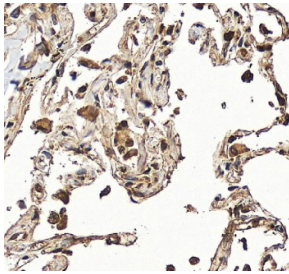
Catalog No.	Formulation	Size
RQ8926	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

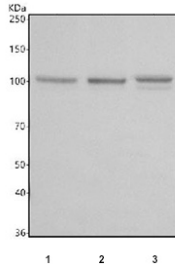
Availability	1-2 business days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P52790
Localization	Cytoplasmic, extracellular
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Flow Cytometry : 1-3ug/million cells ELISA : 0.1-0.5ug/ml
Limitations	This Hexokinase 3 antibody is available for research use only.



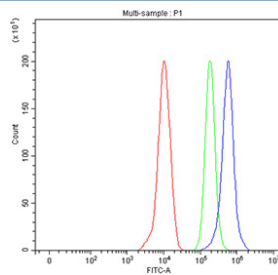
IHC staining of FFPE human liver tissue with Hexokinase 3 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



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Western blot testing of 1) human Raji, 2) human Ramos and 3) human SH-SY5Y cell lysate with Hexokinase 3 antibody. Predicted molecular weight ~99 kDa.



Flow cytometry testing of fixed and permeabilized human ThP-1 cells with Hexokinase 3 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Hexokinase 3 antibody.

Description

Hexokinase 3 (HK3) is a member of the hexokinase enzyme family, which catalyzes the first committed step in glucose metabolism. Like other isoforms, HK3 phosphorylates glucose to produce glucose-6-phosphate, a critical intermediate in glycolysis and the pentose phosphate pathway. This phosphorylation step traps glucose inside the cell and directs it into energy-producing and biosynthetic pathways. Researchers often use a Hexokinase 3 antibody to study cellular metabolism, energy regulation, and metabolic diseases.

HK3 differs from other hexokinase isoforms in its tissue distribution and regulatory properties. It is predominantly expressed in leukocytes and other hematopoietic cells, suggesting a specialized role in immune cell metabolism. Unlike HK1 and HK2, HK3 does not strongly associate with the outer mitochondrial membrane, which may influence its role in apoptosis and energy regulation. Employing a Hexokinase 3 antibody allows scientists to explore its unique expression patterns and its contributions to both glycolysis and immune cell biology.

Altered expression of HK3 has been observed in cancer and inflammatory conditions, where shifts in glucose metabolism play a role in disease progression. HK3 has also been implicated in oxidative stress responses and metabolic reprogramming of immune cells. As interest in immunometabolism continues to grow, HK3 remains an important protein for research into metabolic regulation and disease. Using a Hexokinase 3 antibody enables reliable detection of this isoform in various biological contexts.

NSJ Bioreagents provides a high-quality Hexokinase 3 antibody validated for applications such as western blot, immunohistochemistry, and immunofluorescence. Choosing a Hexokinase 3 antibody from NSJ Bioreagents ensures consistent performance and reproducible results in studies of glucose metabolism, immunometabolism, and disease mechanisms.

Application Notes

Optimal dilution of the Hexokinase 3 antibody should be determined by the researcher.

Immunogen

A human recombinant partial protein (amino acids M1-K789) was used as the immunogen for the Hexokinase 3 antibody.

Storage

After reconstitution, the Hexokinase 3 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.