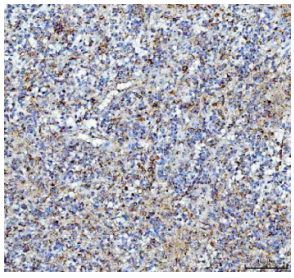
Pleiotrophin Antibody / PTN (R30484)

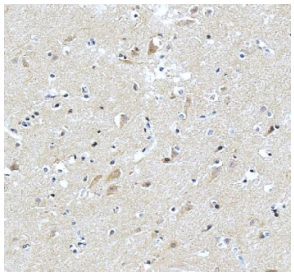
Catalog No.	Formulation	Size
R30484	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

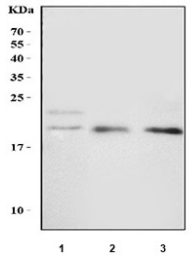
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P21246
Localization	Cytoplasmic, membranous
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml
Limitations	This Pleiotrophin antibody is available for research use only.



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



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



Western blot testing of 1) human U-251, 2) rat brain and 3) mouse brain tissue lysate with Pleiotrophin antibody. Predicted molecular weight ~19 kDa.

Description

Pleiotrophin is a heparin-binding growth factor involved in numerous biological processes, including cellular proliferation, differentiation, angiogenesis, and neural development. It is highly expressed during embryonic development and plays a critical role in tissue remodeling, neurogenesis, and repair mechanisms in the adult central nervous system. Pleiotrophin exerts its effects through interactions with cell surface receptors such as receptor-type protein tyrosine phosphatase beta/zeta and anaplastic lymphoma kinase, triggering signaling cascades that influence cell growth and migration.

The human Pleiotrophin gene produces at least 2 known isoforms through alternative splicing. These isoforms may exhibit differences in their biological activity and tissue distribution. Understanding the expression and localization of each isoform is crucial for unraveling pleiotrophinÃ¢Â€Â™s diverse physiological roles, particularly in cancer biology, neurobiology, and regenerative medicine.

A high-quality Pleiotrophin antibody is essential for detecting this protein in various research applications. The Pleiotrophin antibody provided by NSJ Bioreagents is optimized for use in western blotting, immunohistochemistry, and ELISA, enabling accurate detection of both major isoforms. Researchers investigating tumor progression, nerve regeneration, or developmental processes will benefit from the reliability and specificity of our Pleiotrophin antibody. The inclusion of isoform coverage ensures comprehensive analysis of Pleiotrophin function in both normal and pathological conditions.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the Pleiotrophin antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the C-terminus of human Pleiotrophin (QAESKKKKKEGKKQEKMLD) was used as the immunogen for this Pleiotrophin antibody (100% homologous in human, mouse and rat).

Storage

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

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