

CYP26B1 Antibody / Cytochrome P450 26B1 (FY13120)

Catalog No.	Formulation	Size
FY13120	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q9NR63
Applications	Western Blot: 0.25-0.5ug/ml Immunohistochemistry: 2-5ug/ml Immunocytochemistry/Immunofluorescence: 5ug/ml Flow Cytometry: 1-3ug/million cells ELISA: 0.1-0.5ug/ml
Limitations	This CYP26B1 antibody is available for research use only.

Description

CYP26B1 antibody detects Cytochrome P450 26B1, a retinoic acid-metabolizing enzyme that controls tissue-specific retinoid signaling. The UniProt recommended name is Cytochrome P450 26B1 (CYP26B1). This enzyme belongs to the cytochrome P450 superfamily and catalyzes the hydroxylation and inactivation of all-trans-retinoic acid, maintaining its spatial and temporal concentration during development.

Functionally, CYP26B1 antibody identifies a 512-amino-acid endoplasmic reticulum membrane protein containing a hemebinding domain essential for oxidative metabolism. CYP26B1 converts retinoic acid into hydroxylated metabolites such as 4-hydroxy-retinoic acid and 18-hydroxy-retinoic acid. This reaction ensures proper morphogen gradients required for organ patterning, skeletal formation, and germ cell development.

The CYP26B1 gene is located on chromosome 2p13.2 and is expressed in multiple tissues, including brain, liver, gonads, and embryonic structures. During embryogenesis, CYP26B1 expression establishes regional retinoic acid boundaries, preventing inappropriate activation of retinoic acid-responsive genes. In adults, CYP26B1 regulates tissue regeneration

and detoxification of retinoid compounds.

Pathologically, mutations or altered CYP26B1 expression are associated with developmental defects such as craniofacial malformations, skeletal abnormalities, and infertility. Overexpression has also been linked to tumor progression via retinoid resistance. Research using CYP26B1 antibody supports studies in developmental biology, metabolism, and retinoid pharmacology.

CYP26B1 antibody is validated for western blotting, immunohistochemistry, and enzyme assays to detect cytochrome P450 enzymes involved in retinoid metabolism. NSJ Bioreagents provides CYP26B1 antibody reagents optimized for developmental, metabolic, and molecular biology research.

Structurally, Cytochrome P450 26B1 features conserved P450 motifs, including the heme-binding cysteine loop and oxygen activation domains. This antibody aids studies on CYP26B1Â's role in retinoid turnover, tissue patterning, and disease development.

Application Notes

Optimal dilution of the CYP26B1 antibody should be determined by the researcher.

Immunogen

E.coli-derived human CYP26B1 recombinant protein (Position: N101-A302) was used as the immunogen for the CYP26B1 antibody.

Storage

After reconstitution, the CYP26B1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.