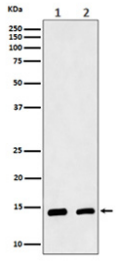
CRABP2 Antibody / Cellular retinoic acid-binding protein 2 [clone 30C81] (FY12848)

Catalog No.	Formulation	Size
FY12848	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human, Mouse, Rat
Format	Liquid
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	30C81
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	P29373
Applications	Western Blot : 1:500-1:2000 Immunohistochemistry : 1:50-1:200 Immunocytochemistry/Immunofluorescence : 1:50-1:200 Flow Cytometry : 1:50
Limitations	This CRABP2 antibody is available for research use only.



Western blot analysis of CRABP2 expression in (1) human MCF7 cell lysate; (2) mouse skin lysate. Predicted molecular weight ~16 kDa.

Description

CRABP2 antibody detects cellular retinoic acid-binding protein 2, encoded by the CRABP2 gene. Alternate names include

CRABP-II, cellular retinoic acid-binding protein type II, and RA-binding protein 2. CRABP2 is a cytoplasmic protein that binds retinoic acid with high affinity, delivering it to the nucleus to interact with retinoic acid receptors (RARs). This shuttling mechanism ensures efficient retinoic acid signaling, which regulates cell differentiation, growth, and development. Structurally, CRABP2 belongs to the fatty acid-binding protein family, characterized by a beta-barrel fold that binds hydrophobic ligands.

CRABP2 antibody is widely applied in developmental biology, cancer research, and dermatology. Retinoic acid is essential for embryonic patterning, limb development, and organogenesis, and CRABP2 ensures delivery of ligand to nuclear receptors. In skin, CRABP2 regulates keratinocyte differentiation and retinoid responses, linking it to dermatological therapies. In cancer biology, CRABP2 expression modulates sensitivity to retinoids, influencing proliferation and apoptosis.

Applications of CRABP2 antibody include western blotting, immunohistochemistry, immunofluorescence, and ELISA. Western blotting detects CRABP2 protein in cell and tissue lysates, immunohistochemistry maps expression in embryonic and tumor tissues, and immunofluorescence highlights cytoplasmic and nuclear localization. These methods support research into retinoid signaling in diverse contexts.

Dysregulation of CRABP2 is linked to developmental abnormalities, cancer progression, and skin disease. Overexpression promotes retinoid sensitivity in some cancers, while downregulation confers resistance. By applying CRABP2 antibody, researchers can study how retinoid signaling contributes to disease and therapy response.

CRABP2 interacts with nuclear RARs, cytoplasmic enzymes, and signaling molecules. This positions it as a central mediator of vitamin A biology. NSJ Bioreagents provides CRABP2 antibody with validated specificity, supporting accurate detection in studies of development, cancer, and dermatology.

Application Notes

Optimal dilution of the CRABP2 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human CRABP2 was used as the immunogen for the CRABP2 antibody.

Storage

Store the CRABP2 antibody at -20oC.