

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Adiponutrin/PNPLA3 in direct ELISA.
Source	Monoclonal Mouse IgG _{2B} Clone # 847516
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Adiponutrin/PNPLA3 Arg160-Arg349 Accession # Q9NST1
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

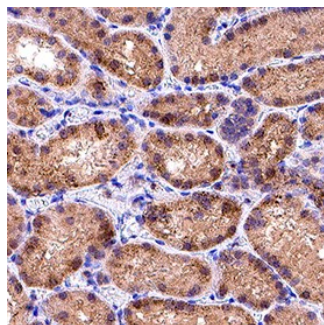
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Immunohistochemistry	5-25 µg/mL	Immersion fixed paraffin-embedded sections of Human Kidney

DATA

Immunohistochemistry



Detection of Adiponutrin/PNPLA3 in Human Kidney. Adiponutrin/PNPLA3 was detected in immersion fixed paraffin-embedded sections of Human Kidney using Mouse Anti-Human Adiponutrin/PNPLA3 Monoclonal Antibody (Catalog # MAB5208) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in epithelial cells in convoluted tubules. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Human Adiponutrin (ADPN; also PNPLA3 and patatin-like phospholipase domain-containing protein 3) is a 53 kDa member of the PNPLA family of phospholipase A2 enzymes. It is expressed in white adipocytes. Adiponutrin is elevated in response to insulin and appears to act not as a phospholipase, but a molecule involved in anabolic pathways. ADPN is likely to be a type II transmembrane protein that is 481 amino acids (aa) in length. It contains one patatin domain (aa 10-179) that is associated with *in vitro* enzyme activity and a transmembrane segment between aa 42-62. There appear to be two splice variants. One shows a four aa deletion of aa 59-62 and a second shows an alternate start site at Met379. Over aa 160-349, human ADPN shares 61% aa identity with mouse Adiponutrin.