Anti-NUDT21 Polyclonal Antibody

Cat: K109219P

Summary:

【**Product name**】: Anti-NUDT21 antibody

【**Source**】: Rabbit

【**Isotype**】: IgG

【**Species reactivity**】: Human Mouse Rat

【**Swiss Prot**】: O43809

【**Gene ID**】: 11051

【**Calculated**】: MW:26kDa

【**Purification**】: Affinity purification

【**Tested applications**】: IHC

【**Recommended dilution**】: IHC 1:50-200.

【**IHC Positive sample**】: Human breast cancer

【**Subcellular location**】: Cytoplasm Nucleus

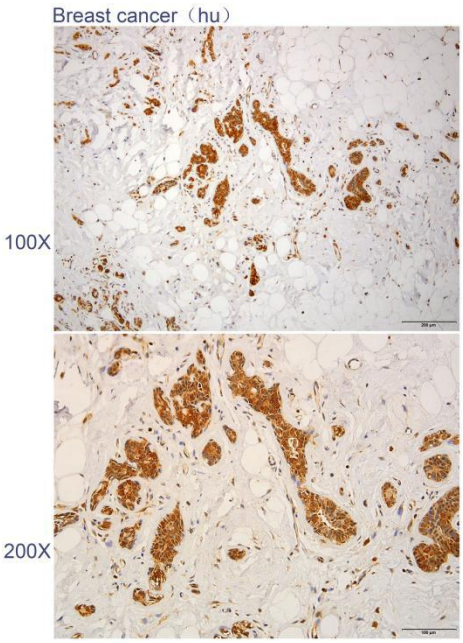
【**Immunogen**】: A synthetic peptide of human NUDT21

【**Storage**】: Shipped at 4°C. Upon delivery aliquot and store at -20°C

Background:

Component of the cleavage factor Im (CFIm) complex that functions as an activator of the pre-mRNA 3'-end cleavage and polyadenylation processing required for the maturation of pre-mRNA into functional mRNAs. CFIm contributes to the recruitment of multiprotein complexes on specific sequences on the pre-mRNA 3'-end, so called cleavage and polyadenylation signals (pA signals). Most pre-mRNAs contain multiple pA signals, resulting in alternative cleavage and polyadenylation (APA) producing mRNAs with variable 3'-end formation. The CFIm complex acts as a key regulator of cleavage and polyadenylation site choice during APA through its binding to 5'-UGUA-3' elements localized in the 3'-untranslated region (UTR) for a huge number of pre-mRNAs. NUDT21/CPSF5 activates indirectly the mRNA 3'-processing machinery by recruiting CPSF6 and/or CPSF7. Binds to 5'-UGUA-3' elements localized upstream of pA signals that act as enhancers of pre-mRNA 3'-end processing. The homodimer mediates simultaneous sequence-specific recognition of two 5'-UGUA-3' elements within the pre-mRNA. Plays a role in somatic cell fate transitions and pluripotency by regulating widespread changes in gene expression through an APA-dependent function (By similarity). Binds to chromatin (By similarity). Binds to, but does not hydrolyze mono- and di-adenosine nucleotides.

Verified picture



Immunohistochemistry of paraffin-embedded Human breast cancer with NUDT21 antibody diluted at 1:80