

Rabbit Anti-Amyloid Beta Precursor Protein (APP) [MD333R]: RM0319, RM0319RTU7

Intended Use: For Research Use Only

Description: Amyloid beta precursor protein (APP) is a 100-140 kDa transmembrane glycoprotein that exists as several isoforms. Proteolytic cleavage of the APP gives rise to the β -Amyloid and Amyloid A4 proteins, which are present in human platelets. Amyloid deposition is associated with type II diabetes, Down syndrome and a variety of neurological disorders, including Alzheimer's disease. APP undergoes alternative splicing, resulting in several isoforms. Proteolytic cleavage of APP leads to the formation of the 4 kDa β -Amyloid/A4 protein. This protein is involved in the formation of neurofibrillary tangles and plaques that characterize the senile plaques of Alzheimer's patients. APLP1 (amyloid precursor-like protein 1) and APLP2 are structurally similar to APP. Human APLP2 is a membrane-bound sperm protein that contains a region highly homologous to the transmembrane-cytoplasmic domains of APP found in brain plaques of Alzheimer's disease patients.

Specifications:

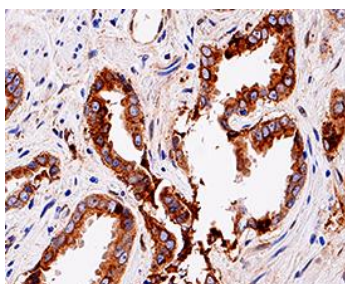
Clone: MD333R
 Source: Rabbit
 Isotype: IgG
 Reactivity: Human
 Immunogen: Synthetic peptide corresponding to residues surrounding Pro620 of human APP protein
 Localization: Cytoplasm
 Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
 Storage: Store at 2°- 8°C.
 Applications: IHC, IF, IP, WB
 Package:

Description	Catalog No.	Size
Amyloid Beta Precursor Protein (APP) Concentrated	RM0319	1 ml
Amyloid Beta Precursor Protein (APP) Prediluted	RM0319RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Brain, colon cancer, prostate cancer
 Concentrated Dilution: 25-100
 Pretreatment: Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human prostate carcinoma stained with anti-APP using DAB

References:

1. Mutations in the COPI coatomer subunit α -COP induce release of A β -42 and amyloid precursor protein intracellular domain and increase tau oligomerization and release. Jacob W Astroski, et al. Neurobiol Aging. May:101:57-69, 2021. doi: 10.1016/j.neurobiolaging.
2. Dabigatran reduces thrombin-induced neuroinflammation and AD markers in vitro: Therapeutic relevance for Alzheimer's disease. Syed Waseem Bihaghi, et al. Cereb Circ Cogn Behav. 2021 May 6:2:100014. doi: 10.1016/j.cccb.2021.100014.