

ARG54377 anti-BACE2 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes BACE2
Tested Reactivity	Hu, Ms
Tested Application	IHC-P, WB
Specificity	This antibody recognizes human, mouse, and rat BACE2 (approx. 75 kD).
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	BACE2
Species	Human
Immunogen	Peptide corresponding to aa 44-59 of human BACE2.
Conjugation	Un-conjugated
Alternate Names	Beta-site APP cleaving enzyme 2; ASP21; EC 3.4.23.45; Membrane-associated aspartic protease 1; DRAP; BAE2; Down region aspartic protease; CEAP1; Beta-secretase 2; Memapsin-1; Aspartyl protease 1; Aspartic-like protease 56 kDa; ALP56; AEPLC; Asp 1; Theta-secretase; CDA13; Beta-site amyloid precursor protein cleaving enzyme 2; ASP1

Application Instructions

Application table	Application	Dilution
	IHC-P	10-20 µg/mL
	WB	1-2 µg/mL
Application Note	Western blot: use at 1:500 - 1:1,000 dilution. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Human heart tissue lysate	

Properties

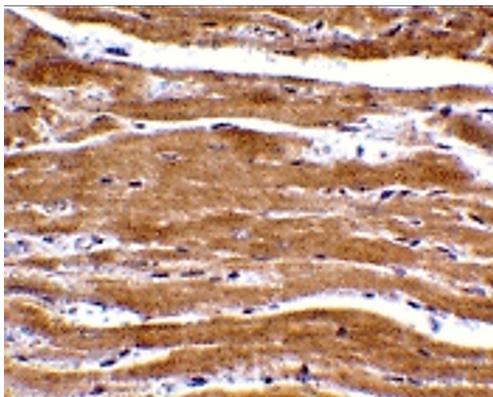
Form	Liquid
Purification	Immunoaffinity chroma-tography
Buffer	PBS (pH 7.4) and 0.02% Sodium azide
Preservative	0.02% Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 25825 Human GeneID: 56175 Mouse Swiss-port # Q9JL18 Mouse Swiss-port # Q9Y5Z0 Human
Gene Symbol	BACE2
Gene Full Name	beta-site APP-cleaving enzyme 2
Background	Accumulation of the amyloid- β peptide ($A\beta$) in the cerebral cortex is a critical event in the pathogenesis of Alzheimer's disease. $A\beta$ peptide is generated as a result of proteolytic cleavage of the β -amyloid protein precursor (APP) at β - and γ -sites. β -secretase was recently identified and designated beta-site APP cleaving enzyme (BACE) and aspartyl protease 2 (Asp2). A BACE homolog was recently identified and designated BACE2, or Asp1, DRAP (for Down region aspartic protease), or memapsin 1. BACE2 cleaves APP at the β -site and at a different site within $A\beta$. BACE2 is found on chromosome 21q22.3, the 'Down critical region', suggesting that BACE2 and $A\beta$ may also contribute to the pathogenesis of Down syndrome.
Function	Responsible for the proteolytic processing of the amyloid precursor protein (APP). Cleaves APP, between residues 690 and 691, leading to the generation and extracellular release of beta-cleaved soluble APP, and a corresponding cell-associated C-terminal fragment which is later released by gamma-secretase. It has also been shown that it can cleave APP between residues 671 and 672. [UniProt]
Research Area	Cell Biology and Cellular Response antibody; Neuroscience antibody
Calculated Mw	56 kDa
PTM	Undergoes autoproteolytic cleavage. Glycosylated.

Images



ARG54377 anti-BACE2 antibody IHC validated image

Immunohistochemistry: Mouse heart stained with ARG54377 anti-BACE2 antibody at 10 μ g/ml dilution.

ARG54377 anti-BACE2 antibody WB validated image

Western blot: Human heart stained with ARG54377 anti-BACE2 antibody at 1 $\mu\text{g/ml}$ dilution.

