

β -Amyloid (1-37 Specific) (D2A6H) Rabbit mAb

✓ 100 μ l
(10 western blots)

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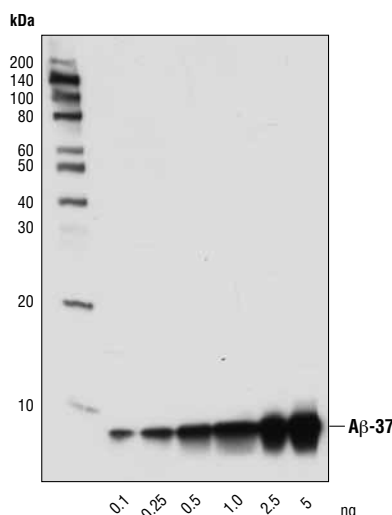
New 01/13

For Research Use Only. Not For Use In Diagnostic Procedures.

Entrez-Gene ID #351
Swiss-Prot Acc. #P05067

Applications W Endogenous	Species Cross-Reactivity* H, (M, R, Mk, B)	Molecular Wt. 4 kDa	Isotype Rabbit IgG**
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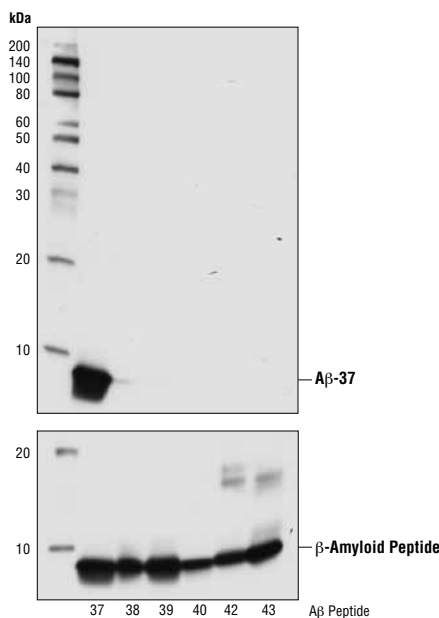
Background: Amyloid β ($A\beta$) precursor protein (APP) is a 100-140 kDa transmembrane glycoprotein that exists as several isoforms (1). The amino acid sequence of APP contains the amyloid domain, which can be released by a two-step proteolytic cleavage (1). The extracellular deposition and accumulation of the released $A\beta$ fragments form the main components of amyloid plaques in Alzheimer's disease (AD) (1). APP can be phosphorylated at several sites, which may affect the proteolytic processing and secretion of this protein (2-5). Phosphorylation at Thr668 (a position corresponding to the APP695 isoform) by cyclin-dependent kinase is cell-cycle dependent and peaks during G2/M phase (4). APP phosphorylated at Thr668 exists in adult rat brain and correlates with cultured neuronal differentiation (5,6).



Western blot analysis of the indicated amounts of human $A\beta$ -37 peptide using β -Amyloid (1-37 Specific) (D2A6H) Rabbit mAb.

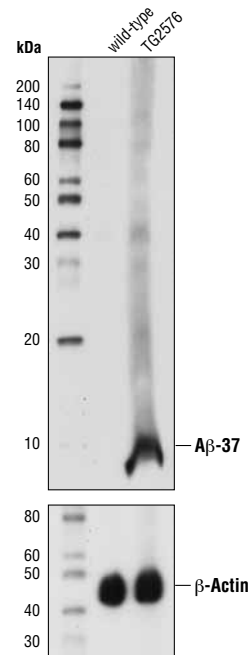
Specificity/Sensitivity: β -Amyloid (1-37 Specific) (D2A6H) Rabbit mAb recognizes the $A\beta$ -37 isoform of the β -amyloid peptides. This antibody does not cross-react with other β -amyloid peptides.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues at the carboxy terminus of human β -amyloid (1-37) peptide.



Western blot analysis of human $A\beta$ -37, $A\beta$ -38, $A\beta$ -39, $A\beta$ -40, $A\beta$ -42, and $A\beta$ -43 peptides (10 ng) using β -Amyloid (1-37 Specific) (D2A6H) Rabbit mAb (upper) or β -Amyloid (D54D2) XP® Rabbit mAb #8243 (lower).

Western blot analysis of brain extracts from 13-month old wild-type and TG2576 mice using β -Amyloid (1-37 Specific) (D2A6H) Rabbit mAb (upper) or β -Actin (D6A8) Rabbit mAb #8457 (lower).



Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C . Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000

For product specific protocols please see the web page for this product at www.cellsignaling.com.

Please visit www.cellsignaling.com for a complete listing of recommended complementary products.

Background References:

- (1) Selkoe, D.J. (1996) *J Biol Chem* 271, 18295-8.
- (2) Caporaso, G.L. et al. (1992) *Proc Natl Acad Sci USA* 89, 3055-9.
- (3) Hung, A.Y. and Selkoe, D.J. (1994) *EMBO J* 13, 534-42.
- (4) Suzuki, T. et al. (1994) *EMBO J* 13, 1114-22.
- (5) Ando, K. et al. (1999) *J Neurosci* 19, 4421-7.
- (6) Iijima, K. et al. (2000) *J Neurochem* 75, 1085-91.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.