

ALZHEIMER'S DISEASE SIGNALING PATHWAY

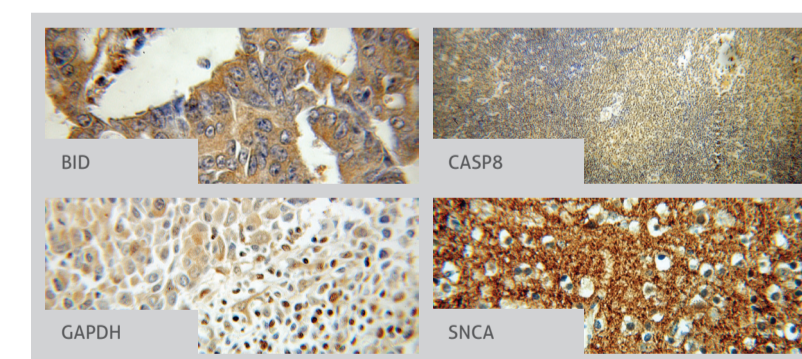
Alzheimer's disease (AD) is a chronic disorder that slowly destroys neurons and causes serious cognitive disability. It is the most common form of dementia. AD is associated with senile plaques and neurofibrillary tangles (NFTs). Amyloid-beta, a major component of senile plaques, has various pathological effects on cell and organelle function. Extracellular amyloid-beta oligomers may activate caspases through activation of cell surface death receptors. Alternatively, intracellular amyloid-beta may contribute to pathology by facilitating tau hyper-phosphorylation, disrupting mitochondria function and triggering calcium dysfunction. To date, genetic studies have revealed four genes that may be linked to autosomal dominant or familial early onset AD (FAD). These four genes include: amyloid precursor protein (APP), presenilin 1 (PS1), presenilin 2 (PS2). All mutations associated with APP and PS proteins can lead to an increase in the production of amyloid-beta peptides, specifically the more amyloidogenic form, amyloid-beta 42. FAD-linked PS1 mutation downregulates the unfolded protein response and leads to vulnerability to ER stress.

Legend	
→	Association
→	Directly Activates
→	Indirectly Activates
→	Inhibits
P	Phosphorylates

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Antibody Name	Catalog Number	Type	Applications
ABAD/HSO17B10	10648-1-AP	Rabbit Poly	ELISA, FC, IHC, IP, WB
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APP	10524-1-AP	Rabbit Poly	ELISA, WB
APP-BP1	14863-1-AP	Rabbit Poly	ELISA, IP, WB
BACE1	12807-1-AP	Rabbit Poly	ELISA, WB
BAD	10435-1-AP	Rabbit Poly	ELISA, IHC, WB
BID	10988-1-AP	Rabbit Poly	ELISA, F, IHC, IP, WB
Calpain	10538-1-AP	Rabbit Poly	ELISA, FC, IE, IHC, IP, WB
CASP8	13423-1-AP	Rabbit Poly	ELISA, IE, IHC, IP, WB
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CYC1/2/MAPK1	16443-1-AP	Rabbit Poly	ELISA, IE, IHC, WB
ERK1/2/MAPK1	51068-1-AP	Rabbit Poly	ELISA, IE, IHC, WB
FADD	14906-1-AP	Rabbit Poly	ELISA, IE, IHC, IP, WB
FAS/TNFR	13098-1-AP	Rabbit Poly	ELISA, FC, IE, IHC, IP, WB
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GAPDH	10404-1-AP	Rabbit Poly	ELISA, FC, IE, IHC, IP, WB
GNAQ1	13927-1-AP	Rabbit Poly	WLSA, WB
GSK3B	15113-1-AP	Rabbit Poly	ELISA, IHC, IP, WB
GSK3R	51065-1-AP	Rabbit Poly	ELISA, IE, IHC, IP, WB
LPL	16899-1-AP	Rabbit Poly	ELISA, WB
NCSTN	14071-1-AP	Rabbit Poly	ELISA, IP, WB



Antibody Name	Catalog Number	Type	Applications
NEP (MME)	18008-1-AP	Rabbit Poly	ELISA, IF, IHC, IP, WB
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PSEN1	16163-1-AP	Rabbit Poly	ELISA, IP, WB
SNCA	10842-1-AP	Rabbit Poly	ELISA, IF, IHC, WB
Tau/MAPT	10274-1-AP	Rabbit Poly	ELISA, IHC, WB
TNF	17590-1-AP	Rabbit Poly	ELISA, IHC

This number shows the amount of times our antibody has been cited in a publication.

CONTACT DETAILS

www.ptglab.com

PROTEINTECH GROUP

US Head Office

A: Proteintech Group, Inc.
5400 Pearl Street,
Rosemont, IL, 60018,
USA
T: 1 (888) 4PTGLAB,
(1-888-478-4522)
(toll free in USA),
or 1 (312) 455-8498
(outside USA)
F: 1 (312) 455-8408
E: proteintech@ptglab.com

PROTEINTECH EUROPE

United Kingdom

A: Proteintech Europe, Inc.
Manchester Science Park
Lloyd Street North
Manchester
M15 6SE
T: +44 (161) 2266144
F: 1 (312) 455-8408
E: eu@ptglab.com

PROTEINTECH China Office

China Office

A: Wuhan Sanying Biotechnologies,
D3-3, No.666 Gaixin Avenue,
Wuhan East Lake Hi-tech
Development Zone,
Wuhan, Hubei, P.R.C
T: 027-87531629
or 4006-900-926
F: 027-87531627
E: service@ptglab.com

