

AG-25B-0006

15-Oct-2010

anti-Asc, pAb (AL177)

[Pycard; Target of Methylation-induced Silencing 1; TMS1; Caspase Recruitment Domain-containing Protein 5; Apoptosis-associated Speck-like Protein Containing CARD; CARD5]

AG-25B-0006-C100 100 µg

Source/Host Rabbit
Immunogen Synthetic peptide corresponding to aa at the N-terminal human Asc.

Handling / Storage

Shipping BLUE ICE
Short Term Storage +4°C
Long Term Storage -20°C

After opening, prepare aliquots and store at -20°C. Avoid freeze/thaw cycles.

Use / Stability

Stable for at least 1 year after receipt when stored at -20°C.

MSDS available at www.adipogen.com or upon request.

Product Specifications

Specificity Recognizes human and mouse Asc.
Species Crossreactivity Human / Mouse
Application **Immunocytochemistry** (1:200)
 Immunohistochemistry: (1:500; paraffin sections)
 Immunoprecipitation: (1:200)
 Western Blot: (1:1000)
 Functional Application: (see Protocol)
Formulation Liquid. In PBS containing 0.02% sodium azide.
Concentration 1mg/ml

Product Description

Asc promotes caspase-mediated apoptosis. This proapoptotic activity is mediated predominantly through the activation of caspase-9. It is a component of the inflammasome, a protein complex which also includes NLRP3/NALP3, CARD8 and CASP1 and whose function is the activation of proinflammatory caspases.

WARNING: Intended for research use only. This product is not intended or approved for human, diagnostics, therapeutic or veterinary use. Use of this product for human or animal testing is extremely hazardous and may result in disease, severe injury, or death. **MATERIAL SAFETY DATA:** Review the complete Material Safety Data Sheet before use.

North/South America:
Adipogen Corp.
9853 Pacific Heights Blvd., Suite L
San Diego, CA 92121-4721
USA
TEL (858) 457-8383
FAX (858) 457-8484
info-us@adipogen.com

Rest of World:
Adipogen AG
Schützenstrasse 12
4410 Liestal
Switzerland
TEL +41-61-926-60-40
FAX +41-61-926-60-49
info@adipogen.com

For Local Distributors please visit
www.adipogen.com

Product Specific References

1. NALP3 forms an IL-1beta-processing inflammasome with increased activity in Muckle-Wells autoinflammatory disorder: L. Agostini, et al.; *Immunity* **20**, 319 (2004)
2. P2X7 Receptor Differentially Couples to Distinct Release Pathways for IL-1beta in Mouse Macrophage: P. Pelegrin, et al.; *J. Immunol.* **180**, 7147 (2008)
3. Inflammatory role of ASC in antigen-induced arthritis is independent of caspase-1, NALP-3, and IPAF: L. Kolly, et al.; *J. Immunol.* **183**, 4003 (2009) (IF)
4. Activation of autophagy by inflammatory signals limits IL-1b production by targeting ubiquitinated inflammasomes for destruction: C.-S. Shi, et al.; *Nat. Immunol.* **13**, 255 (2012)
5. NLRP3 is activated in Alzheimer's disease and contributes to pathology in APP/PS1 mice: M.T. Heneka, et al.; *Nature* **493**, 674 (2013) (IF)
6. Measuring inflammasome activation in response to bacterial infection: P. Broz & D.M. Monack; *Methods Mol. Biol.* **1040**, 65 (2013)
7. Promyelocytic leukemia protein interacts with the apoptosis-associated speck-like protein to limit inflammasome activation: J.K. Dowling, et al.; *J. Biol. Chem.* **289**, 6429 (2014)
8. Localization and functionality of the inflammasome in neutrophils: M. Bakele, et al.; *J. Biol. Chem.* **289**, 5320 (2014)
9. The adaptor ASC has extracellular and 'prionoid' activities that propagate inflammation: B.S. Franklin, et al.; *Nat. Immunol.* **15**, 727 (2014) (IF)
10. The NLRP3 inflammasome is released as a particulate danger signal that amplifies the inflammatory response: A. Baroja-Mazo, et al.; *Nat. Immunol.* **15**, 738 (2014)
11. Aging-associated TNF production primes inflammasome activation and Nlrp3-related metabolic disturbances: F. Bauernfeind, et al.; *J. Immunol.* **197**, 2900 (2016)
12. Measuring NLR Oligomerization II: Detection of ASC Speck Formation by Confocal Microscopy and Immunofluorescence: M. Beilharz, et al.; *Methods Mol. Biol.* **1417**, 145 (2016)
13. Cell-Free Assay for Inflammasome Activation: Y. Jamilloux & F. Martinon; *Methods Mol. Biol.* **1417**, 207 (2016)
14. The inflammasome pathway in stable COPD and acute exacerbations: R. Faner, et al.; *ERJ Open Res.* **2**, 00002-2016 (2016) (IF)
15. A single domain antibody fragment that recognizes the adaptor ASC defines the role of ASC domains in inflammasome assembly: F.I. Schmidt, et al.; *J. Exp. Med.* **213**, 771 (2016) (IF)
16. Microglia-derived ASC specks cross-seed amyloid-β in Alzheimer's disease: C. Venegas, et al.; *Nature* **552**, 355 (2017) (IF)
17. The IL-1/IL-1 receptor axis and tumor cell released inflammasome adaptor ASC are key regulators of TSLP secretion by cancer associated fibroblasts in pancreatic cancer: E. Brunetto, et al.; *J. Immunother. Cancer* **7**, 45 (2019) (IF)
18. NLRP3 inflammasome activation drives tau pathology: C. Ising, et al.; *Nature* **575**, 669 (2019) (IF)

WARNING: Intended for research use only. This product is not intended or approved for human, diagnostics, therapeutic or veterinary use. Use of this product for human or animal testing is extremely hazardous and may result in disease, severe injury, or death. **MATERIAL SAFETY DATA:** Review the complete Material Safety Data Sheet before use.

North/South America:

Adipogen Corp.
9853 Pacific Heights Blvd., Suite L
San Diego, CA 92121-4721
USA
TEL (858) 457-8383
FAX (858) 457-8484
info-us@adipogen.com

Rest of World:

Adipogen AG
Schützenstrasse 12
4410 Liestal
Switzerland
TEL +41-61-926-60-40
FAX +41-61-926-60-49
info@adipogen.com

For Local Distributors please visit

www.adipogen.com

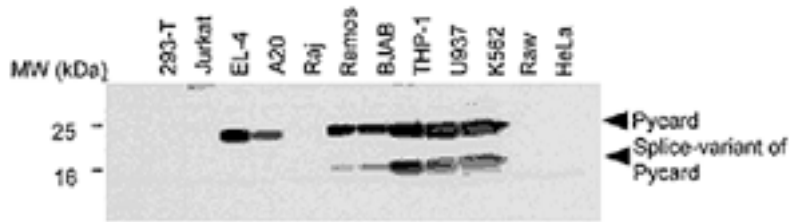


Figure 1: Western blot analysis of human and mouse cell lines using anti-Asc, pAb (AL177) (Prod. No. AG-25B-0006).

Total protein extracts from various human (293-T, Jurkat, Raj, Ramos, BJAB, THP-1, U937, K562, Raw, HeLa) and mouse (EL-4, A20) cell lines were run on SDS-PAGE and Pycard detected by anti-Asc, pAb (AL177) at 1:1'000 dilution. Anti-rabbit IgG coupled horse radish peroxidase was used at 1:5'000 dilution for ECL detection.

WARNING: Intended for research use only. This product is not intended or approved for human, diagnostics, therapeutic or veterinary use. Use of this product for human or animal testing is extremely hazardous and may result in disease, severe injury, or death. **MATERIAL SAFETY DATA:** Review the complete Material Safety Data Sheet before use.

North/South America:
Adipogen Corp.
9853 Pacific Heights Blvd., Suite L
San Diego, CA 92121-4721
USA
TEL (858) 457-8383
FAX (858) 457-8484
info-us@adipogen.com

Rest of World:
Adipogen AG
Schützenstrasse 12
4410 Liestal
Switzerland
TEL +41-61-926-60-40
FAX +41-61-926-60-49
info@adipogen.com

For Local Distributors please visit
www.adipogen.com