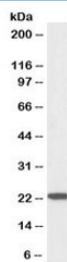


PYCARD Antibody Biotin Conjugate (R35605BTN)

Catalog No.	Formulation	Size
R35605BTN	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

[Bulk quote request](#)

Availability	1-3 business days
Species Reactivity	Human
Format	Biotin Conjugate
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	29108
Applications	Western Blot : 1-3ug/ml ELISA (peptide) LOD : 1:32000
Limitations	This PYCARD Antibody Biotin Conjugate is available for research use only.



PYCARD Antibody Biotin Conjugate WB. Western blot analysis of human U937 cell lysate using PYCARD Antibody Biotin Conjugate at 3 ug/ml. A distinct immunoreactive band is detected at approximately 22 kDa, consistent with the predicted molecular weight of PYCARD (ASC), supporting specific detection of the endogenous inflammasome adaptor protein in human U937 cells.

Description

PYCARD Antibody Biotin Conjugate recognizes PYCARD, also known as apoptosis-associated speck-like protein containing a CARD (ASC), a bipartite adaptor protein that serves as a central organizer of inflammasome signaling. PYCARD contains both a pyrin domain and a caspase recruitment domain, enabling it to bridge activated pattern recognition receptors with inflammatory caspases during innate immune responses. Through this adaptor function, PYCARD promotes assembly of multiprotein inflammasome complexes that activate caspase 1, stimulate inflammatory cytokine maturation, and initiate pyroptotic cell death. PYCARD Antibody Biotin Conjugate provides a convenient tool for

sensitive detection of this key inflammasome adaptor using biotin-based immunodetection systems.

PYCARD functions downstream of several innate immune receptors, including NLRP3, AIM2, and additional inflammasome-forming sensors. Upon recognition of pathogens, danger-associated molecular patterns, or cellular stress, PYCARD rapidly oligomerizes into characteristic ASC specks that recruit inflammatory caspases and amplify innate immune signaling. These events lead to processing of interleukin 1 beta and interleukin 18 while promoting pyroptosis, an inflammatory form of programmed cell death that eliminates infected or damaged cells. As a result, PYCARD is widely studied in host defense, inflammation, and immune regulation.

Aberrant PYCARD activity has been implicated in infectious diseases, autoimmune disorders, chronic inflammatory conditions, neurodegenerative disease, cardiovascular pathology, metabolic disorders, and cancer. Because inflammasome activation plays a central role in both protective immunity and inflammatory pathology, PYCARD remains an important biomarker and potential therapeutic target. The biotin conjugate format is particularly useful for applications requiring enhanced detection sensitivity or flexible signal amplification through streptavidin-based detection systems.

NSJ Bioreagents' PYCARD Antibody Biotin Conjugate is suitable for immunohistochemistry, immunocytochemistry, immunofluorescence, flow cytometry, and other biotin-compatible immunoassays. By combining the specificity of a validated anti-PYCARD antibody with the versatility of biotin labeling, PYCARD Antibody Biotin Conjugate provides researchers with a reliable reagent for investigating inflammasome assembly, ASC speck formation, innate immune signaling, and inflammatory disease mechanisms across a broad range of experimental applications.

Learn more about PYCARD biology, inflammasome signaling, and additional validated products on our [PYCARD Antibody](#) page.

Application Notes

Optimal dilution of the PYCARD Antibody Biotin Conjugate should be determined by the researcher.

Immunogen

Amino acids RESQSYLVEDLERS were used as the immunogen for this TMS1 antibody.

Storage

Aliquot and store the PYCARD Antibody Biotin Conjugate at -20oC.