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BM679 Monoclonal Antibody to Peptidoglycan - Ascites

Alternate names: Murein

Quantity: 0.1 ml

Host / Isotype: Mouse / IgG1

Clone: 10H6

Immunogen: This antibody was raised against insoluble PG obtained by TCA-heat and ethanol extraction of *Streptococcus mutans* BHT cells.

Format: **State:** Liquid Ascites without preservative or stabilizer

Applications: **ELISA.**
Western blot.Immunohistochemistry on Frozen Sections.
Immunohistochemistry on Paraffin Sections: Treatment with strong acid for Gram positive bacteria, or with a detergent such as SDS for Gram-negative bacteria may be necessary to expose the epitope.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: Reacts with the 3D polymer complex structure of peptidoglycan (PG). In a competitive immunoassay format, several compounds were found to be ineffective as inhibitors; muramyldipeptide, N-acetylglucosamine, chitin and acid hydrolyzed chitin.
The epitope appears to consist of discontinuous glycan and/or amino acid residues and has not been fully defined.

Storage: Upon receipt, store undiluted (in aliquots) at -20°C.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:

1. Miklossy, J. et al (2004) Borrelia burgdorferi persists in the brain in chronic lyme neuroborreliosis and may be associated with Alzheimer disease. J. Alzheimer's Dis. 6: 639-649.
2. Wu, L. et al. (2007) Bacterial peptidoglycan breaks down intestinal tolerance via mast cell activation: the role of TLR2 and NOD2. Immunol Cell Biol. 85: 538-45.
3. Rennemeier, C. et al. (2007) Thrombospondin-1 promotes cellular adherence of gram-positive pathogens via recognition of peptidoglycan. FASEB J. 21 (12): 3118-32.
4. Schweitzer, M.H. et al. (2016) Testing the Hypothesis of Biofilm as a Source for Soft Tissue and Cell-Like Structures Preserved in Dinosaur Bone. PLoS One. 11 (2): e0150238.
5. Miklossy J et al. (2008) Persisting atypical and cystic forms of Borrelia burgdorferi and local inflammation in Lyme neuroborreliosis. J Neuroinflammation. 5: 40.
6. Robertson, J. et al. (2016) Intestinal APCs of the endogenous nanomineral pathway fail to express PD-L1 in Crohn's disease. Sci Rep. 6: 26747.
7. Miklossy, J. (2016) Bacterial Amyloid and DNA are Important Constituents of Senile Plaques: Further Evidence of the Spirochetal and Biofilm Nature of Senile Plaques. J Alzheimers Dis. 53 (4): 1459-73.
8. Miklossy, J. et al. (2008) Type 2 Diabetes: Local Inflammation and Direct Effect of

Bacterial Toxic Components The Open Pathology Journal. 2 (1): 86-95.
9. Van Gerven, N. et al. (2014) Secretion and functional display of fusion proteins through the curli biogenesis pathway. Mol Microbiol. 91 (5): 1022-35.