3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

ProductInformation

MONOCLONAL ANTI-UBIQUITIN
Clone 6C1
Mouse Ascites Fluid

Product Number **U 0508**

Product Description

Monoclonal Anti-Ubiquitin (mouse IgG2a isotype) is produced from a mouse hybridoma elicited from BALB/c mice immunized with purified bovine ubiquitin conjugated to KLH (keyhole limpet hemocyanin) as the immunogen.

Monoclonal Anti-Ubiquitin recognizes human, mouse, rat, and bovine ubiquitin. It may be used to localize and detect ubiquitin in various assays including immunoblotting and ELISA. It has not been determined to see if this antibody recognizes yeast ubiquitin. Human and yeast ubiquitin differ by only 3 amino acids.
Ubiquitin, present in both prokaryotes and eukaryotes, is a highly conserved approximately 8.5 kDa, 76 amino acid protein that is reported to function in intracellular regulation. It targets proteins for degradation in the ubiquitin/proteasome pathway. Ubiquitin also regulates signal transduction cascades through inhibitory proteins such as IκBα and p27.[2, 3]

Ubiquitin has a significant role neurodegenerative pathological disorders, such as Alzheimer's disease, Parkinson's disease, and Pick's disease.[4]

Reagent

Monoclonal Anti-Ubiquitin is supplied as an ascites fluid containing 15 mM sodium azide.

Precautions and Disclaimer

Due to the sodium azide content, a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For prolonged storage, freeze in working aliquots at –20 °C. Repeated freezing and thawing in not recommended. Storage in frost-free freezers is also not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

Product Profile

For immunoblotting, a minimum working antibody dilution of 1:1,000 is recommended using a whole cell lysate of human promyelocytic HL60 cells and a chemiluminescent substrate.[5]

Note: In order to obtain the best results using different techniques and preparations, we recommend determining the optimal working dilutions by titration.

References

1. Haas, A..L., and Siepmann, T.J., FASEB J., **11**, 1257-1268 (1997).
2. Pagano, M., et al., Science, **269**, 682-685 (1995).
3. Chen, Z.J., et al., Cell, **84,** 853-862 (1996).
4. Muller, S., and Schwartz, L.M., Bioessays, **17**, 677-684 (1995).
5. Chen, et al., Arch. Biochem. Biophys., **374**, 306-312 (2000).

KAA 05/02