MONOCLONAL ANTIBODY TO MOUSE INTERLEUKIN 6

Clone MP5-32C11

HyCult biotechnology b.v.

Catalog nr

HM1005a (lot number and expiry date are indicated on the label)

Description

The antibody neutralizes mouse interleukin 6 (IL-6). It does not cross-react with LPS (the component of the bacterial cell wall which is considered responsible for the toxicity of gram-negative bacteria) and TNF-alpha nor does it block human or rat IL-6 in proliferation assays using the KD83 cell line. MP5-32C11 inhibits mouse IL-6-induced proliferation of the NFS60 myelomonocytic cell line and KD83 plasmacytoma. IL-6 is a pluripotent 20-22 kDa cytokine which plays a role in the pathophysiology of severe infection and regulates the immune response, acute phase reaction and haematopoiesis. IL-6 plays a critical role in B-cell differentiation to plasma cells and is a potent growth factor for plasmacytoma and myeloma. Continuous IL-6 gene expression makes an essential contribution to a multistep oncogenesis of plasma cell neoplasia. IL-6 is a very useful culture supplement for the generation of a high number of antibody-producing hybridomas.

Species

Rat IgG_{2a}

Formulation

Lyophilized product in PBS, containing 100 µg. Reconstitute the vial by injection of 0.5 ml sterile distilled or de-ionised water (Caution: vial is under vacuum).

Application

The antibody can be used for immunochemical investigations of mouse IL-6 in structural studies and for quantitative/qualitative immunochemical detection methods. The antibody neutralizes the biological activity of mouse IL-6. Furthermore the antibody is useful for Western blot and as tracer antibody use in immuno assay procedures.

Use

For Western blotting dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:10.
For neutralisation of biological activity dilutions have to be made according to the amount of IL-6 to be inactivated.

Storage and stability

Lyophilized product should be stored at 4°C. Store stock solution in aliquots at –20°C. Repeated freeze and thaw cycles will cause loss of activity. Under recommended storage conditions, product is stable for one year.

Precautions

For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and Federal rules in the use of this product. Hbt is not responsible for any patent infringements that might result with the use of or derivation of this product.

References

1. Takatsuki, F et al; Human recombinant IL-6/B cell stimulatory factor 2 augments murine antigen-specific antibody responses in vitro and in vivo. J Immunol 1988, *141*: 3072
2. McKenzie, D et al; Alloantigen presentation by B cells. Requirement for IL-1 and IL-6. J Immunol 1988, *141*: 2907
3. van Snick, J et al; Interleukin-6: an overview. Annu Rev Immunol 1990, *8*: 253
4. Heinrich, PC et al; Interleukin-6 and the acute phase response. Biochem J 1990, *265*: 621
5. Starnes, HF Jr et al; Anti-IL-6 monoclonal antibodies protect against lethal Escherichia coli infection and lethal tumor necrosis factor-alpha challenge in mice. J Immunol 1990, *145*: 4185
6. Hirano, T et al; Interleukin 6 (IL-6) and its receptor: their role in plasma cell neoplasias. Int J Cell Cloning 1991, *9*: 166
7. Hooghe-Peters, E et al; Interleukin-1, interleukin-6: messengers in the neuroendocrine immune system? Pathol Res Pract 1991, *187*: 622

Also available

HM1004a	Monoclonal antibody against Mouse IL-6, clone MP5-20F3; 100 µg
HM1004b	Monoclonal antibody against Mouse IL-6, clone MP5-20F3; 500 µg
HM1005b	Monoclonal antibody against Mouse IL-6, clone MP5-32C11; 500 µg
HP8008	Polyclonal antibody against Mouse IL-6; 100 µg