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# Certificate of Analysis and Data Sheet Mouse Anti-Interleukin-6 Antibody

**Catalog No.**  
130-10058

**Isotype/Clone:**  
Mouse IgG1/2A8-D8-C3

**Species:**  
Human

**Accession No:**  
AAH15511

## Description

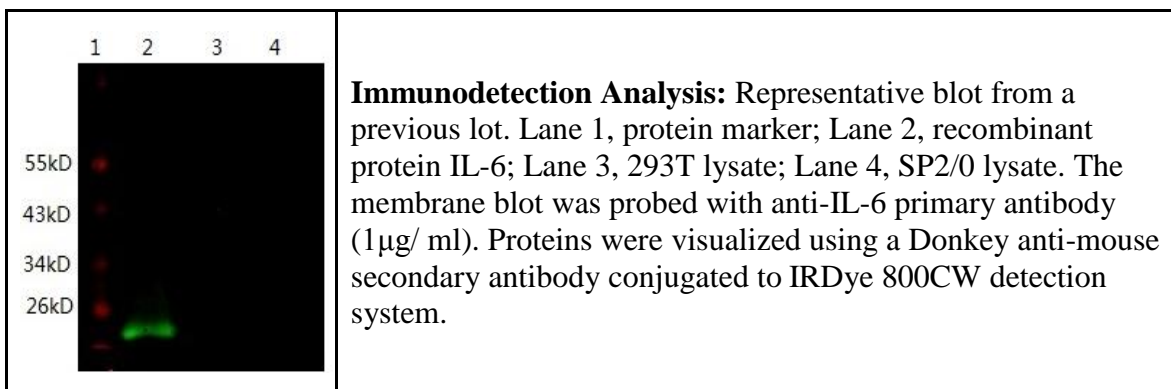
Interleukin-6 (IL-6) is an interleukin, secreted by T cells and macrophages to stimulate immune response to trauma. IL-6 is an anti-inflammatory cytokine mediating through its inhibitory effects on IL-1 and TNF-alpha, and its activation of IL10 and IL-1ra. Interleukin 6 interacts with IL-6 receptor and glycoprotein 130. IL-6 mediates fever and the acute phase response, and is involved in many disease processes, such as prostate cancer, depression, atherosclerosis, diabetes, and rheumatoid arthritis. Metastatic cancer patients have higher blood IL-6.

## Applications

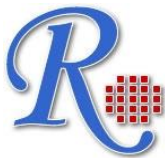
**Table Summary of antibody applications and working conditions**

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	*			at least detecting 15.6ng/ml
Western Blotting	*			1:1000(at least)
Immunohistology - frozen			*	
Immunohistology -paraffin			*	

**Note:** Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.



**The products are furnished for LABORATORY RESEARCH USE ONLY.  
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### **Preparation**

The immunogen was recombinant protein derived from IL-6. This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with the immunogen. The IgG fraction of tissue culture supernatant was purified by Protein G/A affinity chromatography.

### **Binding Activity**

The antibody can specifically bind to its immunogen and did not show any cross reactivity with unrelated antigens in ELISA. The specificity for binding to recombinant protein, cellular protein and native antigen is not defined.

### **Specificity**

The mouse anti-human IL-6 antibody detects targets specifically derived from human recombinant protein at various concentrations. Cross reactivity with mouse and rat are expected from sequence similarity.

### **Reconstitution**

The product is supplied as a powder obtained from lyophilization of purified antibody in PBS without preservatives. Reconstitute the antibody with sterile 1 x PBS to a final concentration of 1 mg/ml.

### **Storage**

Store at 4°C if intended for use within one month, otherwise, store at -20°C to -80°C. The lyophilized antibody is stable for at least 18 months after the date of receipt when stored at -20°C to -80°C. After reconstitution, it can be aliquoted and stored frozen at -20°C to -80°C in a manual defrost freezer for 6 months without detectable loss of activity. Upon reconstitution, the antibody can also be stored for 1 month at 4°C. **Please avoid freeze-thaw cycles, as this will lower the activity of the antibody.**

### **Reference**

1. van der Poll T, et al. (1997). Interleukin-6 gene-deficient mice show impaired defense against pneumococcal pneumonia. *J Infect Dis* 176 (2): 439–44.
2. Kishimoto T, et al. (1995). Interleukin-6 family of cytokines and gp130. *Blood* 86 (4): 1243–1254.
3. Heinrich PC, et al. (2003). Principles of interleukin-6- type cytokine signalling and its regulation. *Biochem. J.* 374 (Pt 1): 1–20.
4. Taga T, et al. Interleukin-6 triggers the association of its receptor with a possible signal transducer, gp130. *Cell* 58 (3): 573–81.

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