

**Anti Thioguanine (2-amino-6-mercaptapurine)
Mouse Monoclonal Antibody**Subclass: IgG₁/κPRODUCT NO. **HYB 144-04**

PRESENTATION Preparation: Protein-A/G purified
Content: 1 ml, 1 mg/mL
Solvent: 0.01 M phosphate buffer, pH 7.4, with 0.5 M NaCl and 15mM sodium azide
Storage: In the dark at 4-8°C

ANTIGEN Thioguanine is a purine analogue used in cancer chemotherapy. It is the 6-thiol analogue of the endogenous 6-OH purine base guanine. In the cell thioguanine is converted to the ribonucleotides: 6-thioguanosine-5'-phosphate and 6-thioinosine-5'-phosphate. These fraudulent nucleotides produce their cytotoxic effects by several mechanisms, e.g. inhibitory action on de novo purine synthesis and may themselves be incorporated into DNA. Thioguanine has a molecular weight of 167 Da (1,2).

IMMUNOGEN 7-substituted thioguanine linked to PPD (2)

SPECIFICITY HYB 144-04 has specificity for thioguanine. Crossreactivity is seen with a variety of thioguanine analogues except 6-thioxanthine and 2-amino-6-(methylthio)purine (2).

EPI TOPE SPECIFICITY Not determined

REACTIVITY HYB 144-04 reacts strongly with free thioguanine and reactivity is primarily dependent on the structure of the pyrimidine ring (2).

CULTURE MEDIUM Dulbecco's modified Eagle's medium with 10% fetal calf serum

FUSION PARTNER X63-Ag8.653.

IMMUNIZATION Female CF1 x BALB/c mice immunized i.p. with immunogen adsorbed onto Al(OH)₃

APPLICATION	Method	Usability	Dilution guideline	References
	ELISA	Yes		
	Immunoblotting	Not determined		
	Immunohistochemistry	Not determined		

The dilution guideline for ELISA is based on use as detection antibody for antigen coated at 0.1-1 µg/ml. Users should determine the optimal dilutions for their own purposes.

REFERENCES

1. Rang HP, Dale MM, Ritter JM (1995) *Chemotherapy. Pharmacology*. New York: Churchill Livingstone 696-717.
2. Nerstrom VM, Henriksen U, Nielsen PE, Buchardt O, Schmiegelow K, Koch C (1994) Monoclonal antibodies to thioguanine: influence of coupling position on fine specificity. *Bioconj Chem* 5:357-363.

CONDITIONS

All products are supplied on the understanding that they are for in vitro use only. The information and product are offered without guarantee as the ultimate conditions of use are beyond our control. The animals from which this product was derived have not been exposed to or inoculated with any livestock or poultry disease agents exotic to the United States or Western Europe, and did not originate from facilities where work with exotic disease agents affecting livestock or avian species is carried out.