

PRODUCT SPECIFICATION

Anti Chorionic gonadotrophin (human, hCG) Mouse Monoclonal Antibody

Subclass: IgG₁/κ

PRODUCT NO.

HYB 093-04

PRESENTATION

Preparation: Protein-A purified
Content: 200 µL, 1 mg/mL
Solvent: 0.01 M phosphate buffer, pH 7.4, with 0.5 M NaCl
Storage: In the dark at 4-8°C

ANTIGEN

Human chorionic gonadotrophin (hCG) is a luteotrophic glycoprotein hormone secreted first by the trophoblastic cells of the fertilized ovum and later by placental tissue (1). The primary function of hCG is its luteotropic effect. hCG consists of non-covalently linked, α and β subunits, 12 kDa and 24 kDa respectively, together constituting holo-hCG (MW 38 kDa) (2).

IMMUNOGEN

Human chorionic gonadotrophin (hCG) isolated from urine of women in early pregnancy.

SPECIFICITY

HYB 093-04 is specific for holo-hCG from human serum/plasma or urine. No cross-reaction is seen with human luteinising hormone. Cross-reactivity to chorionic gonadotropin from other species has not been tested.

EPI TOPE SPECIFICITY

Epitope specificity differs from HYB 093-05 and HYB 093-09 but overlap, as determined by inhibition ELISA.

REACTIVITY

HYB 093-04 reacts with hCG when tested in sandwich ELISA using a polyclonal antibody against hCG as capture antibody. In Western blotting after SDS-PAGE HYB 093-04 reacts weakly with SDS-treated intact hCG and only under nonreducing conditions. No reaction is seen with isolated α-hCG or β-hCG subunits.

CULTURE MEDIUM

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

FUSION PARTNER

X63-Ag8.653.

IMMUNIZATION

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

APPLICATION

Method	Usability	Dilution guideline	References
ELISA	Yes	1:4000	
Immunoblotting	Yes		
Immunohistochemistry	Not determined		

The dilution guideline for ELISA is based on sandwich ELISA in combination with a polyclonal antibody against the antigen. Users should determine the optimal dilutions for their own purpose.

REFERENCES

- Tojo, S (1982) The biology and chemistry of human chorionic gonadotropin. In: Pregnancy proteins (Eds) Academic Press 25-38.
- Schwarz, S (1986) The antigenic surface of human chorionic gonadotropin as mapped by murine monoclonal antibodies. Endocrinology 118:189-97.
- Norgaard-Pedersen B, Larsen SO, Arends J, Svenstrup B, Tabor A (1990) Maternal serum markers in screening for Down syndrome. Clin Genet 37:35-43.

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.