

**Anti-Pregnancy associated plasma protein A (human, PAPP-A)
Mouse monoclonal antibody**

Subclass: IgG2b/k

PRODUCT NO.

BTE 004-09

Clone: NA

PRESENTATION

Preparation: Protein-A/G purified

Content: Available in 200 µL and 1 mL size. 1 mg/mL +/- 15%. See Certificate of Analysis for details.

Solvent: 0.01 M phosphate buffer, pH 7.4, containing 0.5 M NaCl and 15 mM sodium azide

Storage: 4-8°C without exposure to light. No precautions necessary during handling.

ANTIGEN

Pregnancy-associated plasma protein-A (PAPP-A, Insulin-like growth factor binding protein-4 protease, PAPP-A-proMBP complex) is a large heterotetrameric glycoprotein of approximately 500 kDa, which was first discovered in serum from pregnant women. The heterotetramer consists of two PAPP-A subunits and two proMBP subunits. Low maternal serum levels of PAPP-A in first trimester biochemical screening is used as a marker of Down's syndrome (trisomy 21).

IMMUNOGEN

Purified human PAPP-A

SPECIFICITY

BTE 004-09 is specific for native human PAPP-A. Heat and SDS denatured PAPP-A is also recognized, but not acid treated PAPP-A.

EPI TOPE SPECIFICITY

The epitope of BTE 004-09 is different from ABS 006-01 and ABS 006-24. The epitope is located on the PAPP-A subunit of the heterotetramer.

REACTIVITY

In sandwich ELISA the optimal combination is BTE 004-09 used as coating antibody and biotinylated ABS 006-24 used as detection antibody. BTE 004-09 can also be used as detection antibody in sandwich ELISA in combination with a polyclonal antibody towards PAPP-A in coat.

BTE 004-09 detect both reduced and unreduced PAPP-A in Western Blotting, though reaction to unreduced is less than that of ABS 006-01 and ABS 006-24.

CULTURE MEDIUM

Hybridoma Serum Free Medium

FUSION PARTNER

IMMUNIZATION

Female BALB/c mice immunized by intraperitoneal injection

APPLICATION

Method	Usability	References
ELISA	Yes	
Immunoblotting	Yes	
Immunohistochemistry	Yes	

REFERENCES

- Folkersen J, Grudzinskas JG, Hindersson P, Teisner B, Westergaard JG (1981) Purification of pregnancy-associated plasma protein-A by a two step affinity chromatographic procedure. *Placenta* 2:11-17.
- Sinosich MJ, Teisner B, Folkersen J, Saunders DM, Grudzinskas JG (1982) Radioimmunoassay for pregnancy-associated plasma protein A. *Clin Chem* 28:50-53.
- Chemnitz J, Folkersen J, Teisner B, Sinosich MJ, Tornehave D, Westergaard JG, Bolton AE, Grudzinskas JG (1986) Comparison of different antibody preparations against pregnancy-associated plasma protein-A (PAPP-A) for use in localization and immunoassay studies. *Br J Obstet Gynaecol* 93:916-923.
- Sinosich MJ, Sim RB, Teisner B (1990) Characterization of pregnancy-associated plasma protein-A: comparison with alpha 2-macroglobulin. *Biochem Int* 20:579-589.
- Macintosh MC, Iles R, Teisner B, Sharma K, Chard T, Grudzinskas JG, Ward RH, Muller F (1994) Maternal serum human chorionic gonadotrophin and pregnancy-associated plasma protein A, markers for fetal Down syndrome at 8-14 weeks. *Prenat Diagn* 14:203-208.
- Casals E, Fortuny A, Grudzinskas JG, Suzuki Y, Teisner B, Comas C, Sanllehy C, Ojuel J, Borrell A, Soler A, Ballesta AM (1996) First-trimester biochemical screening for Down syndrome with the use of PAPP-A, AFP, and beta-hCG. *Prenat Diagn* 16:405-410.

CONDITIONS

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