



Peninsula Laboratories, LLC

A Member of the Bachem Group

305 Old County Road, San Carlos, CA 94070

Tel: (800) 922-1516 • (650) 592-5392

Fax: (650) 595-4071

www.bachem.com

Monoclonal Antibody to Human PSA Prostate Specific Antigen

Monoclonal antibody F5 detects PSA in epithelial cells of healthy prostate tissues, in benign hyperplastic and malignant prostate tissue and in malignant prostate carcinoma. PSA shares 79% homology in primary structure with human glandular kallikrein 2 (hK2). Both proteins are 237-amino acid monomers with serine protease activity. In serum, most PSA forms stable complexes with α 1-antichymotrypsin (ACT) or α 2-macroglobulin (AMG), of which PSA-ACT is recognized by the F5 antibody. Moreover, F5 recognizes hK2 with about the same affinity.

Product Number:	T-1318
Clone:	F5
Host species, isotype:	Mouse IgG1
Quantity:	200 μ g
Format:	Affinity purified, lyophilized Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.4mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 10mg/ml bovine serum albumin (BSA) as a stabilizer and 0.01% thimerosal as a preservative.
Stability:	Original vial: 1 year at 4° - 8°C Stock solution or aliquots thereof: 1 year at -20°C. Avoid repeated thawing and freezing.
Applications:	Tested for immunohistochemistry (IHC). Approximate working dilution for IHC: Frozen sections: not tested Paraffin sections :0.1 μ g/ml (1:4000); Proteinase K pretreatment for antigen retrieval is recommended. Optimal dilutions should be determined by the end user. Suggested positive control: Human prostate.
Immunogen:	PSA purified from human prostate tissue.
Antigen distribution:	Tissue sections: The antibody reacts only with epithelia of normal, benign and cancerous human prostate.



Peninsula Laboratories, LLC

A Member of the Bachem Group

305 Old County Road, San Carlos, CA 94070

Tel: (800) 922-1516 • (650) 592-5392

Fax: (650) 595-4071

www.bachem.com

Selected references

Wang M.C., L.A. Valenzuela, G.P. Murphy, T.M. Chu: Purification of a human prostate specific antigen. *Invest Urol* **17**: 159-163 (1979)

Chu T.M., E. Kawinski, N.Hibi, G. Croghan, J.Wiley, C.S. Killian, D. Corral: Prostate-specific antigenic domain of human prostate-specific antigen identified with monoclonal antibodies. *J Urol* **141**: 152-156 (1989)

Papsidero L.D., G. Croghan, M.C. Wang, M.Kuriyama, A.E.Johnson, L.A. Valenzuela, T.M. Chu: Monoclonal antibody (F 5) to human prostate antigen. *Hybridoma* **2**: 139 (1983)

Papsidero L.D., G. Croghan, J. Asirwatham, J. Gaeta, P.Abendoza, L. Englander, L.A. Valenzuela: Immunohistochemical demonstration of prostate-specific antigen in metastases with the use of monoclonal antibody F 5. *Am. J. Pathol* **121**: 451 (1985)

Piironen T. et al.: Determination and analysis of antigenic epitopes of prostate specific antigen (PSA) and human glandular kallikrein 2 (hK2) using synthetic peptides and computer modeling. *Protein Science* **7**: 259-269 (1998).

For in vitro research only. Caution: this product contains thimerosal, a poisonous and hazardous substance.