

Prostate Specific Antigen Monoclonal Mouse Antibody (1A7)

Product Description

This antibody recognizes a single protein of 33-34 kDa, identified as the prostate specific antigen (PSA). This MAb is highly specific to PSA and stains prostatic secretory and ductal epithelium in both normal and neoplastic tissues. PSA is a chymotrypsin-like serine protease (kallikrein family) exclusively produced by the prostate epithelium, and abundant in seminal fluid. PSA can be detected in the sera of patients with prostatic carcinoma. It is predominantly complexed to a liver-derived serine protease inhibitor, alpha-1-antichymotrypsin (ACT). A higher proportion of serum PSA is complexed to ACT in prostate cancer than in benign prostate hyperplasia. This MAb makes an excellent pair with MAb A67-B/E3 for PSA tests.

Product attributes	
Antibody number	#0926
Antibody reactivity (target)	Prostate Specific Antigen
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	1A7
Isotype	IgG1, kappa
Molecular weight	33-34 kDa
Synonyms	Antigen, prostate-specific (APS), Gamma-seminoprotein, hK3, Kallikrein related peptidase 3, Kallikrein-3 (KLK3), KLK2A1, P-30 antigen, Semenogelase, Semin
Human gene symbol	KLK3
Entrez gene ID	354
SwissProt	P07288
Unigene	171995
Immunogen	PSA (p30) from human sperm plasma
Antibody target cellular localization	Secreted (extracellular)
Verified antibody applications	IHC (FFPE) (verified)
Species reactivity	Cat, Human
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunohistochemistry (formalin-fixed): 0.5-1.0 ug/mL for 30 minutes at RT, Flow cytometry: 0.5-1 ug/million cells, Immunofluorescence: 0.5-1 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 minutes followed by cooling at RT for 20 minutes, Optimal dilution for a specific application should be determined by user
Positive control	PC-3 or LNCaP cell lysates (WB), Prostate tissue (IHC), LNCaP cells (IF).
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Cell/tissue expression	Prostate
Tumor expression	Prostate cancer
Antibody research areas	Cancer