

STEAP1 (CT) antibody (pAb)

Rabbit Anti-Human/Mouse/Rat STEAP1 (CT)

Instruction Manual

Catalog Number	PK-AB718-4303
Synonyms	STEAP1 Antibody: Six transmembrane epithelial antigen of prostate 1, STEAP
Description	The six-transmembrane epithelial antigen of prostate 1 (STEAP1) was the first member of a family of metalloredutases identified as cell-surface antigens in prostate tissue. The normal function of STEAP is still uncertain; unlike other members of the STEAP family, STEAP1 does not promote iron or copper reduction or uptake and lacks the FNO-like reductase domain critical for activity. However, its expression is highly increased in multiple cancer cell lines, including prostate, bladder, colon, and ovarian cancers. Supporting this is evidence that STEAP1 peptides can be used to stimulate CD8+ T cells from healthy donors, enabling them to recognize STEAP1-positive human tumor cells, suggesting that STEAP1 may a potential target for cancer immunotherapy. At least three isoforms of STEAP1 are known to exist. This STEAP1 antibody does not cross-react with other STEAP proteins.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	STEAP1 antibody was raised in rabbits against an 18 amino acid peptide from near the carboxy terminus of human STEAP1.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	This STEAP1 antibody does not cross-react with other STEAP proteins.
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB, IHC Note: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. STEAP1 antibody can be used for detection of STEAP1 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL.
Images	Available upon request.
References	Hubert RS, Vivanco I, Chen E, et al. STEAP: a prostate-specific cell-surface antigen highly expressed in human prostate tumors. Proc. Natl. Acad. Sci. USA 1999; 96:14523-8. Ohgami RS, Campagna DR, McDonald A, et al. The Steap proteins are metalloredutases. Blood 2006; 108:1388-94. Ohgami RS, Campagna DR, Greer EL, et al. Identification of a ferrireductase required for efficient transferrin-dependent iron uptake in erythroid cells. Nat. Genet. 2005; 37:1264-9. Alves PM, Faure O, Graff-Dubois S, et al. STEAP, a prostate tumor antigen, is a target of human CD8+ T cells. Cancer Immunol. Immunother. 2006; 55:1515-23.
Images	Available upon request.
Related Products	Cat.No. PK-AB718-4303P; STEAP1 Peptide Cat.No. PK-AB718-1306; Human Spleen Tissue Lysate

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