

Instruction Manual

Catalog Number	PK-AB718-4311
Synonyms	STEAP3 Antibody; Six transmembrane epithelial antigen of prostate 3, dudulin-2
Description	The six-transmembrane epithelial antigen of prostate 3 (STEAP3) is a member of a family of metalloredutases identified as cell-surface antigens in prostate tissue. Similar to two other members of the STEAP family (STEAP 2 and STEAP4), STEAP3 promotes both iron and copper reduction. STEAP3 is highly expressed in hematopoietic tissues and colocalizes with the transferrin endosome. Overexpression of STEAP3 stimulates iron reduction; mice lacking STEAP3 are deficient in erythroid ferrireductase activity, suggesting that STEAP3 is an endosomal ferrireductase required for transferrin-dependent iron uptake in erythroid cells. This STEAP3 antibody does not cross-react with other STEAP proteins.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	STEAP3 antibody was raised in rabbits against a 15 amino acid peptide from near the amino terminus of human STEAP3.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	This STEAP3 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, IF INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. STEAP3 antibody can be used for detection of STEAP3 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.
Images	Available upon request.
References	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. Ohgami RS, Campagna DR, McDonald A, et al. The Steap proteins are metalloredutases. Blood 2006; 108:1388-94. Graham RM, Chua ACG, Herbison CE, et al. Liver iron transport. World J. Gastroenterol. 2007; 13:4725-36.
Images	Available upon request.
Related Products	Cat.No. PK-AB718-4311P; STEAP3 Peptide Cat.No. PK-AB718-1464; Rat Liver Tissue Lysate

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