

STEAP1 (D8B2V) Rabbit mAb

Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IP	Reactivity: H R	Sensitivity: Endogenous	MW (kDa): 30	Source/Isotype: Rabbit IgG	UniProt ID: #Q9UHE8	Entrez-Gene Id: 26872
-------------------------------	---------------------------	-----------------------------------	------------------------	--------------------------------------	-------------------------------	---------------------------------

Product Usage Information**Application**

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

STEAP1 (D8B2V) Rabbit mAb recognizes endogenous levels of total STEAP1 protein. This antibody also recognizes overexpressed STEAP1B isoform 1 protein and may recognize endogenous STEAP1B isoform 1 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human STEAP1 protein.

Background

Six transmembrane epithelial antigen of the prostate 1 (STEAP1) is a transmembrane protein abundantly expressed in normal prostate epithelial cells (1). It is a metalloendoreductase that reduces Fe³⁺ to Fe²⁺ and Cu²⁺ to Cu¹⁺ (2). STEAP1 is also reportedly overexpressed in multiple tumor types, and has been used as a cell surface biomarker for prostate cancer and Ewing's sarcoma (3-6). Peptides derived from STEAP1 protein have been shown to induce an antigen-specific cytotoxic T lymphocyte (CTL) response that can kill tumor cells expressing STEAP1 (7). These findings are the basis for research studies examining the efficacy of antibody-drug conjugates (ADCs) targeting STEAP1 (8,9).

Background References

1. Hubert, R.S. et al. (1999) *Proc Natl Acad Sci U S A* 96, 14523-8.
2. Ohgami, R.S. et al. (2006) *Blood* 108, 1388-94.
3. Grunewald, T.G. et al. (2012) *Mol Cancer Res* 10, 52-65.
4. Grunewald, T.G. et al. (2012) *Ann Oncol* 23, 2185-90.
5. Ihlaseh-Catalano, S.M. et al. (2013) *Histopathology* 63, 678-85.
6. Gomes, I.M. et al. (2014) *Urol Oncol* 32, 53.e23-9.
7. Rodeberg, D.A. et al. (2005) *Clin Cancer Res* 11, 4545-52.
8. Williams, S.P. et al. (2016) *Oncotarget* 7, 25103-12.
9. Sukumaran, S. et al. (2016) *AAPS J*, .

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human **R:** Rat

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

XP is a registered trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.