

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human STEAP1 in direct ELISA.
Source	Monoclonal Rabbit IgG Clone # 2959F
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human STEAP1 Met1-Trp71 Accession # Q9UHE8
Conjugate	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Flow Cytometry	10 μ L/10 ⁶ cells	see below

DATA

Flow Cytometry

Detection of STEAP1 in HEK293 cells by Flow Cytometry. HEK293 cells transfected with Human STEAP-1 and eGFP (A) vs irrelevant cells (B) were stained with Rabbit Anti-Human STEAP1 APC-conjugated Monoclonal Antibody (Catalog # FAB55871A). View our protocol for [Staining Membrane-associated Proteins](#).

Flow Cytometry

Detection of STEAP1 in LnCaP cells by Flow Cytometry LnCaP cells were stained with Rabbit Anti-Human STEAP1 APC-conjugated Monoclonal Antibody (Catalog # FAB55871A, filled histogram) or isotype control antibody (Catalog # IC1051A, open histogram). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with saponin. View our protocol for [Staining Intracellular Molecules](#).

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

STEAP1 (six-transmembrane epithelial antigen of the prostate-1) is a 40 kDa protein (predicted) of the STEAP family of metalloreductases. It is expressed mainly at cell-cell junctions between prostate secretory epithelium, and up-regulated in prostate and some bladder, colon and ovarian cancers and Ewing's sarcomas. Human STEAP1 is 339 amino acids (aa) in length. It contains a ferric oxidoreductase domain (aa 119-265) that includes transmembrane sequences (# 2, 3, 4, and part of 5, out of 6 sequences). Two splice forms diverge at aa 255, terminating after aa 58 or 259. Over aa 1-71, human and mouse STEAP1 share 68% aa identity.