For Research Use Only

## PSMD14/POH1 Recombinant antibody, PBS Only (Capture/Detector)

Catalog Number:84767-3-PBS



**Purification Method:** 

Protein A purification

CloneNo.:

242160E7

**Basic Information** 

Catalog Number: GenBank Accession Number:

 84767-3-PBS
 BC009524

 Size:
 GeneID (NCBI):

 1 mg/ml
 10213

 Source:
 UNIPROT ID:

Source: UNIPROT II
Rabbit O00487
Isotype: Full Name:

IgG proteasome (prosome, macropain)
Immunogen Catalog Number: 26S subunit, non-ATPase, 14

AG2694 Calculated MW:

35 kDa Observed MW: 33 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, Cytometric bead array, Sandwich

ELISA, Indirect ELISA, Sample test

Species Specificity: human, mouse

**Background Information** 

The PSMD14 (POH1, also known as Rpn11/MPR1/S13/CepP1) protein is a metalloprotease component of the 26S proteasome that specifically cleaves 'Lys-63'-linked polyubiquitin chains. The 26S proteasome is involved in the ATP-dependent degradation of ubiquitinated proteins. PSMD14 is highly expressed in the heart and skeletal muscle. In carcinoma cell lines. down-regulation of PSMD14 by siRNA transfection had a considerable impact on cell viability causing cell arrest in the GO-G1 phase, ultimately leading to senescence.

Storage

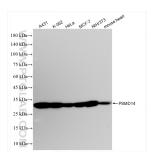
Storage:

Store at -80°C.

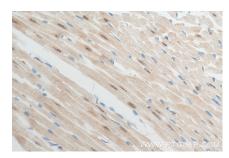
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer: PBS Only

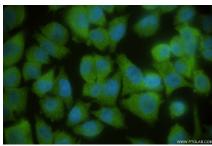
## Selected Validation Data



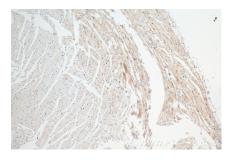
Various lysates were subjected to SDS PAGE followed by western blot with 84767-3-RR (PSMD14/POH1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84767-3-PBS in a different storage buffer formulation



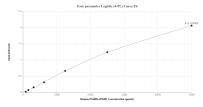
Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 84767-3-RR (PSMD14/POH1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84767-3-PBS in a different storage buffer formulation.



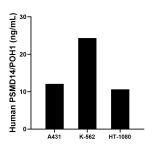
Immunofluorescent analysis of (4% PFA) fixed A375 cells using PSMD14/POH1 antibody (84767-3-RR, Clone: 242160E7) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 84767-3-PBS in a different storage buffer formulation.



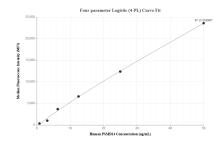
Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 84767-3-RR (PSMD14/POH1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84767-3-PBS in a different storage buffer formulation.



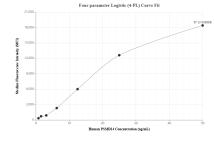
Sandwich ELISA standard curve of MP01566-3, Human PSMD14/POH1 Recombinant Matched Antibody Pair - PBS only. 84767-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag2694. 84767-3-PBS was HRP conjugated as the detection antibody. Range: 78.1-5000 pg/mL.



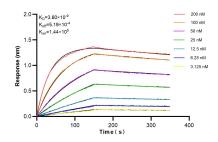
The mean PSMD14/POH1 concentration was determined to be 12.08 ng/mL in A431 cell extract based on a 1.30 mg/mL extract load, 24.32 ng/mL in K-562 cell extract based on a 2.40 mg/mL extract load and 10.64 ng/mL in HT-1080 cell extract based on a 1.40 mg/mL extract load.



Cytometric bead array standard curve of MP01566-1, PSMD14/POH1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84767-3-PBS. Detection antibody: 84767-2-PBS. Standard: Ag2694. Range: 0.781-50 ng/mL



Cytometric bead array standard curve of MP01566-2, PSMD14/POH1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84767-3-PBS. Detection antibody: 84767-1-PBS. Standard: Ag2694. Range: 0.781-50 ng/mL



Biolayer interferometry (BLI) kinetic assays of 84767-3-RR against Human PSMD14/POH1 were performed. The affinity constant is 3.60 nM.