

## Product datasheet for **TA327024**

### PSMA3 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, IP, WB
Recommended Dilution:	WB 1:500 - 1:2000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant protein of human PSMA3
Formulation:	Store at -20C or -80C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	proteasome subunit alpha 3
Database Link:	<a href="#">NP_002779</a> <a href="#">Entrez Gene 19167 Mouse</a> <a href="#">Entrez Gene 29670 Rat</a> <a href="#">Entrez Gene 5684 Human</a> <a href="#">P25788</a>



[View online »](#)

<b>Background:</b>	<p>The 20S proteasome is the major proteolytic enzyme complex involved in intracellular protein degradation. It consists of four stacked rings, each with seven distinct subunits. The two outer layers are identical rings composed of <math>\alpha</math> subunits (called PSMA3s), and the two inner layers are identical rings composed of <math>\beta</math> subunits. While the catalytic sites are located on the <math>\beta</math> rings, the <math>\alpha</math> subunits are important for assembly and as binding sites for regulatory proteins. Seven different <math>\alpha</math> and ten different <math>\beta</math> proteasome genes have been identified in mammals. PA700, PA28, and PA200 are three major protein complexes that function as activators of the 20S proteasome. PA700 binds polyubiquitin with high affinity and associates with the 20S proteasome to form the 26S proteasome, which preferentially degrades poly-ubiquitinated proteins. The proteasome has a broad substrate spectrum that includes cell cycle regulators, signaling molecules, tumor suppressors, and transcription factors. By controlling the degradation of these intracellular proteins, the proteasome functions in cell cycle regulation, cancer development, immune responses, protein folding, and disease progression.</p>
<b>Synonyms:</b>	HC8; PSC3
<b>Protein Families:</b>	Druggable Genome, Protease, Stem cell - Pluripotency
<b>Protein Pathways:</b>	Proteasome