

Goat Anti-TRAP2 / Proteasome subunit 26S Antibody Peptide-affinity purified goat antibody Catalog # AF2107a

Specification

Goat Anti-TRAP2 / Proteasome subunit 26S Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, E <u>Q13200</u> <u>NP_002799</u>, <u>5708</u> Human Mouse, Rat, Dog Goat Polyclonal 100ug/200ul IgG 100200

Goat Anti-TRAP2 / Proteasome subunit 26S Antibody - Additional Information

Gene ID 5708

Other Names

26S proteasome non-ATPase regulatory subunit 2, 26S proteasome regulatory subunit RPN1, 26S proteasome regulatory subunit S2, 26S proteasome subunit p97, Protein 55.11, Tumor necrosis factor type 1 receptor-associated protein 2, PSMD2, TRAP2

Dilution WB~~1:1000 E~~N/A

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-TRAP2 / Proteasome subunit 26S Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-TRAP2 / Proteasome subunit 26S Antibody - Protein Information

Name PSMD2

Synonyms TRAP2



Function

Component of the 26S proteasome, a multiprotein complex involved in the ATP-dependent degradation of ubiquitinated proteins. This complex plays a key role in the maintenance of protein homeostasis by removing misfolded or damaged proteins, which could impair cellular functions, and by removing proteins whose functions are no longer required. Therefore, the proteasome participates in numerous cellular processes, including cell cycle progression, apoptosis, or DNA damage repair.

Tissue Location

Found in skeletal muscle, liver, heart, brain, kidney, pancreas, lung and placenta

Goat Anti-TRAP2 / Proteasome subunit 26S Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Goat Anti-TRAP2 / Proteasome subunit 26S Antibody - Images



AF2107a (0.03 μ g/ml) staining of A431 lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-TRAP2 / Proteasome subunit 26S Antibody - Background

The 26S proteasome is a multicatalytic proteinase complex with a highly ordered structure composed of 2 complexes, a 20S core and a 19S regulator. The 20S core is composed of 4 rings of 28 non-identical subunits; 2 rings are composed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. The 19S regulator is composed of a base, which contains 6 ATPase subunits and 2 non-ATPase subunits, and a lid, which contains up to 10 non-ATPase subunits. Proteasomes are distributed throughout eukaryotic cells at a high concentration and cleave peptides in an ATP/ubiquitin-dependent process in a non-lysosomal pathway. An essential function of a modified proteasome, the immunoproteasome, is the processing of class I MHC peptides. This gene encodes



one of the non-ATPase subunits of the 19S regulator lid. In addition to participation in proteasome function, this subunit may also participate in the TNF signalling pathway since it interacts with the tumor necrosis factor type 1 receptor. A pseudogene has been identified on chromosome 1.

Goat Anti-TRAP2 / Proteasome subunit 26S Antibody - References

Proteomic identification of putative biomarkers of radiotherapy resistance: a possible role for the 26S proteasome? Smith L, et al. Neoplasia, 2009 Nov. PMID 19881955.

Regulated endoplasmic reticulum-associated degradation of a polytopic protein: p97 recruits proteasomes to Insig-1 before extraction from membranes. Ikeda Y, et al. J Biol Chem, 2009 Dec 11. PMID 19815544.

Regulation of the proteasome by neuronal activity and calcium/calmodulin-dependent protein kinase II. Djakovic SN, et al. J Biol Chem, 2009 Sep 25. PMID 19638347.

Follow-up examination of linkage and association to chromosome 1q43 in multiple sclerosis. McCauley JL, et al. Genes Immun, 2009 Oct. PMID 19626040.

Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.