

## Product datasheet for **CF504420**

### SPG7 Mouse Monoclonal Antibody [Clone ID: OTI1C12]

#### Product data:

|                         |  |
|-------------------------|--|
| Product Type:           | Primary Antibodies   |
| Clone Name:             | OTI1C12  |
| Applications:           | FC, IF, WB   |
| Recommended Dilution:   | WB 1:500~2000, IF 1:50~100, FLOW 1:100   |
| Reactivity:             | Human, Mouse, Rat  |
| Host:                   | Mouse  |
| Isotype:                | IgG2a  |
| Clonality:              | Monoclonal   |
| Immunogen:              | Human recombinant protein fragment corresponding to amino acids 300-573 of human SPG7(NP_003110) produced in E.coli.   |
| Formulation:            | Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)  |
| Reconstitution Method:  | For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific) |
| Purification:           | Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)  |
| Conjugation:            | Unconjugated   |
| Storage:                | Store at -20°C as received.  |
| Stability:              | Stable for 12 months from date of receipt.   |
| Predicted Protein Size: | 88.1 kDa   |
| Gene Name:              | SPG7 matrix AAA peptidase subunit, paraplegin  |
| Database Link:          | <a href="#">NP_003110</a><br><a href="#">Entrez Gene 234847</a> <a href="#">MouseEntrez Gene 353231</a> <a href="#">RatEntrez Gene 6687</a> <a href="#">Human Q9UQ90</a>   |



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**Background:**

This gene encodes a nuclear-encoded mitochondrial metalloprotease protein that is a member of the AAA (ATPases associated with a variety of cellular activities) protein family. Members of this protein family share an ATPase domain and have roles in diverse cellular processes including membrane trafficking, intracellular motility, organelle biogenesis, protein folding, and proteolysis. Two transcript variants encoding distinct isoforms have been identified for this gene. Mutations associated with this gene cause autosomal recessive spastic paraplegia 7. [provided by RefSeq]

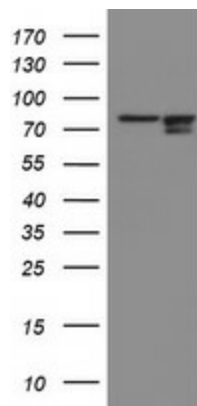
**Synonyms:**

CAR; CMAR; PGN; SPG5C

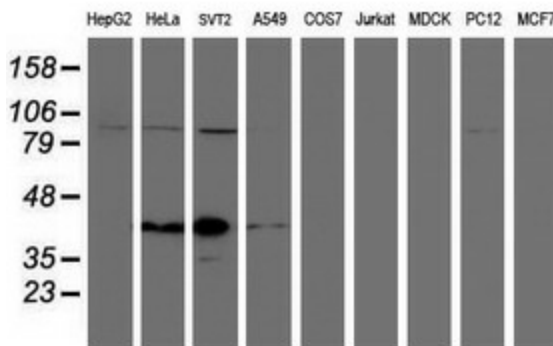
**Protein Families:**

Protease, Transmembrane

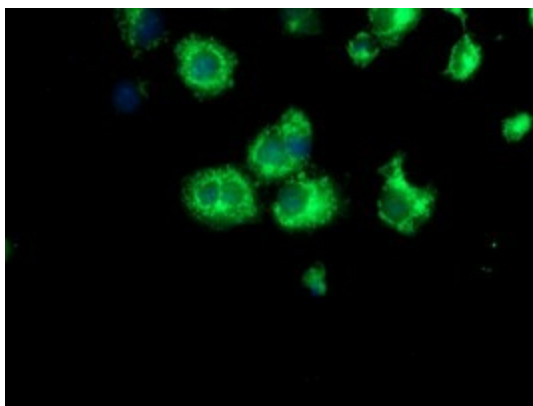
**Product images:**



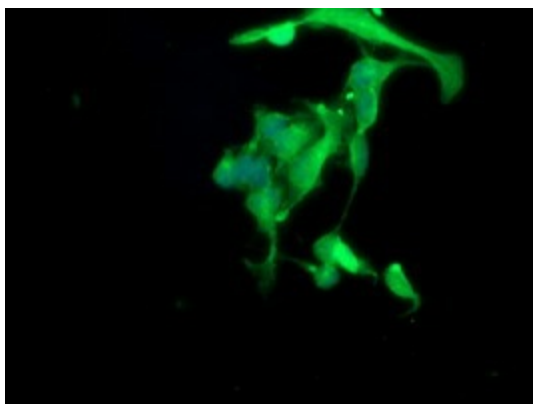
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY SPG7 [RC206340], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SPG7. Positive lysates [LY401085] (100ug) and [LC401085] (20ug) can be purchased separately from OriGene.



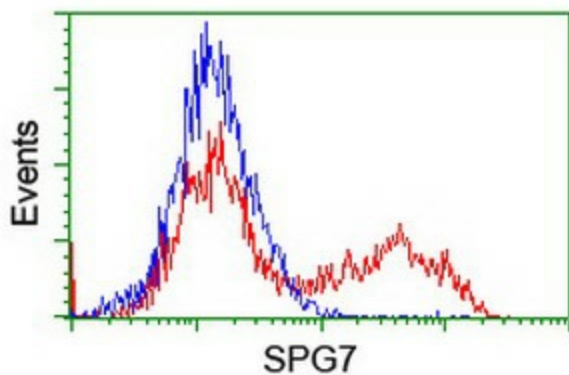
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-SPG7 monoclonal antibody.



Anti-SPG7 mouse monoclonal antibody ([TA504420]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY SPG7 ([RC206340]).



Immunofluorescent staining of HeLa cells using anti-SPG7 mouse monoclonal antibody ([TA504420]).



HEK293T cells transfected with either [RC206340] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-SPG7 antibody ([TA504420]), and then analyzed by flow cytometry.