

**DESCRIPTION**

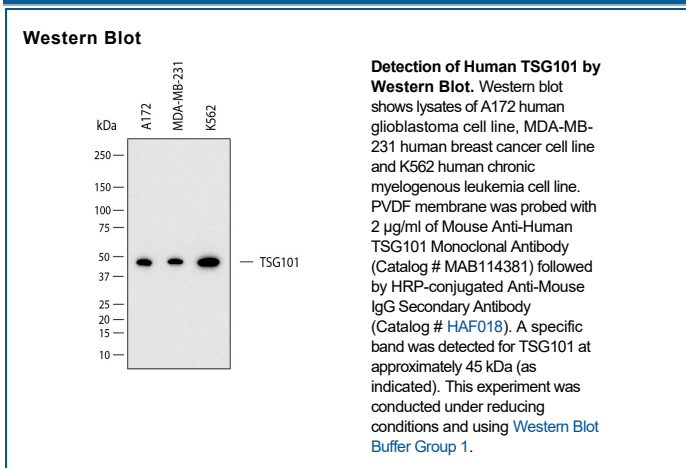
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects TSG101 in direct ELISA.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 1065916
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	TSG101 containing synthetic peptide Accession # Q99816
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	2 µg/mL	A172 human glioblastoma cell line, MDA-MB-231 human breast cancer cell line and K562 human chronic myelogenous leukemia cell line

**DATA**



**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

TSG101 is an essential member of the ESCRT-1 complex which regulates the sorting of ubiquitinated proteins to endosomes, facilitating vesicular trafficking and is implicated in normal development. It is also involved in regulating transcription, protein sorting, biogenesis of multi-vesicular bodies, and viral budding. Dysregulation of ESCRT proteins occurs in the development of various human diseases, including many types of cancers and neurodegenerative diseases. TSG101 is an established cancer-associated gene and truncated aberrantly spliced mRNAs have been reported in various types of cancer. TSG101 is also commonly used as a marker protein for exosomes.

**References:**

1. Tufan AB, Lazarow K, Kolesnichenko M, Sporbert A, von Kries JP, Scheidereit C. TSG101 associates with PARP1 and is essential for PARylation and DNA damage-induced NF-κB activation. *EMBO J.* 2022 Nov 2;**41(21)**:e1110372. doi: 10.15252/emj.2021110372. Epub 2022 Sep 20. PMID: 36124865; PMCID: PMC9627669.
2. Chua HH, Kameyama T, Mayeda A, Yeh TH. Cancer-Specifically Re-Spliced TSG101 mRNA Promotes Invasion and Metastasis of Nasopharyngeal Carcinoma. *Int J Mol Sci.* 2019 Feb 12;**20(3)**:773. doi: 10.3390/ijms20030773. PMID: 30759747; PMCID: PMC6387056.
3. Willms E, Johansson HJ, Mäger I, Lee Y, Blomberg KE, Sadik M, Alaarg A, Smith CI, Lehtiö J, El Andaloussi S, Wood MJ, Vader P. Cells release subpopulations of exosomes with distinct molecular and biological properties. *Sci Rep.* 2016 Mar 2;**6**:22519. doi: 10.1038/srep22519. PMID: 26931825; PMCID: PMC4773763.