

## DESCRIPTION

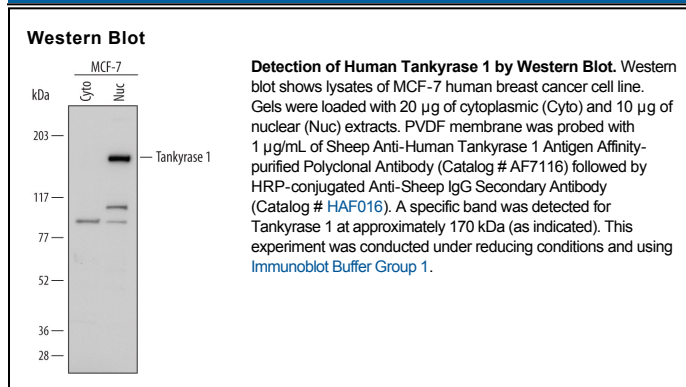
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Tankyrase 1 in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Tankyrase 1 Ala943-Gly1039 Accession # O95271
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

## 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.

	Recommended Concentration	Sample
<b>Western Blot</b>	1 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <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

TNKS (Tankyrase; also TRF1-interacting, ANKYrin-Related ADP-ribose polymerase and TNKS1, TANK1 and PARP5A) is a 165-170 kDa member of the PARP family of proteins. It is ubiquitously expressed and participates in at least two critical cellular functions. First, via ribosylation activity, it inhibits TRF1, a regulator of telomere length. This promotes chromosomal lengthening. Second, it activates the Wnt signaling pathway by promoting Axin-1 and -2 degradation, resulting in β-catenin activation. Human TNKS is 1327 amino acids (aa) in length. It contains polyHis, Pro and Ser regions (aa 9-134), 15 ankyrin repeats (aa 215-934), one SAM motif (aa 1030-1089) and a PARP catalytic domain (aa 1112-1317). There are three potential splice variants. One shows a three aa substitution for aa 640-1327, another contains a 43 aa substitution for aa 1-327, while a third possesses a 20 aa substitution for aa 300-327. Over aa 943-1039, human TNKS shares 97% aa identity with mouse TNKS.