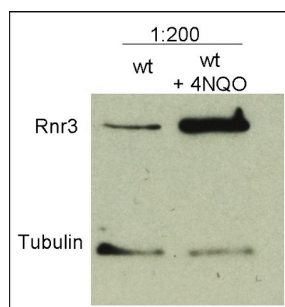


Product no **AS09 574****Rnr3 | Ribonucleoside-diphosphate reductase large chain 2****Product information**

Immunogen	KLH-conjugated synthetic peptide derived from <i>Saccharomyces cerevisiae</i> Rnr3 protein sequence UniProt: P21672
Host	Rabbit
Clonality	Polyclonal
Purity	Immunogen affinity purified serum in PBS pH 7.4.
Format	Lyophilized
Quantity	100 µg
Reconstitution	For reconstitution add 100 µl of sterile water
Storage	Store lyophilized/reconstituted at -20°C; once reconstituted make aliquots to avoid repeated freeze-thaw cycles. Please remember to spin the tubes briefly prior to opening them to avoid any losses that might occur from material adhering to the cap or sides of the tube.

Application information

Recommended dilution	1 : 500-1 : 1000 (WB)
Expected apparent MW	97,5 98 kDa
Confirmed reactivity	<i>Saccharomyces cerevisiae</i>
Predicted reactivity	<i>Saccharomyces cerevisiae</i>
Not reactive in	No confirmed exceptions from predicted reactivity are currently known
Additional information	Load per well was approx 3x10 ⁶ cells (of a total extract)
Selected references	<p>Ajazi et al. (2021) Endosomal trafficking and DNA damage checkpoint kinases dictate survival to replication stress by regulating amino acid uptake and protein synthesis. <i>Dev Cell.</i> 2021 Sep 27;56(18):2607-2622.e6. doi: 10.1016/j.devcel.2021.08.019. Epub 2021 Sep 16. PMID: 34534458.</p> <p>Cerritelli et al. (2020). High density of unrepaired genomic ribonucleotides leads to Topoisomerase 1-mediated severe growth defects in absence of ribonucleotide reductase. <i>Nucleic Acids Res</i></p> <p>Sampaio-Marques et al. (2019). ?-Synuclein toxicity in yeast and human cells is caused by cell cycle re-entry and autophagy degradation of ribonucleotide reductase 1. <i>Aging Cell.</i> 2019 Aug;18(4):e12922. doi: 10.1111/acer.12922.</p> <p>Schmidt et al. (2019). Inactivation of folic polyglutamate synthetase Met7 results in genome instability driven by an increased dUTP/dTTP ratio. <i>Nucleic Acids Res.</i> 2019 Oct 24. pii: gkz1006. doi: 10.1093/nar/gkz1006.</p> <p>Lafuente-Barquero et al. (2017). The Smc5/6 complex regulates the yeast Mph1 helicase at RNA-DNA hybrid-mediated DNA damage. <i>PLOS Genetics</i>, December 27, 2017, doi.org/10.1371/journal.pgen.1007136</p>

Application example

10 µl total protein from 9.25 x 10⁷ cells of *Saccharomyces cerevisiae* extracted with 20% TCA as described below were separated on 10% SDS-PAGE and blotted 1.5h (0.5 A) to a nitrocellulose membrane (Whatman PROTRAN BA 85, 0.45 µm). Blots were blocked with 5% non-fat dry milk in TBST for 1.5h at room temperature (RT) with agitation. Blot was incubated in the primary antibody at a dilution of 1: 200 overnight at 4°C with agitation. The antibody solution was decanted and the blot was washed 3 times for 10 min in TBST at RT with agitation. Blot was incubated in secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated, [\(AS09 602\)](#) diluted to 1:50 000 for 1h at RT with agitation. The blot was washed as above and developed for 3 min with chemiluminescent detection reagent, according to the manufacturers instructions. Exposure time was 10 min.

Courtesy Dr. Andrei Chabes, Umeå University, Sweden