

EXD2 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55658**Specification****EXD2 Polyclonal Antibody - Product Information**

Application	IHC-P, WB
Primary Accession	Q9NVH0
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	70353

EXD2 Polyclonal Antibody - Additional Information**Gene ID** 55218**Other Names**

Exonuclease 3'-5' domain-containing protein 2, 3.1.11.1, 3'-5' exoribonuclease EXD2, 3.1.13.-, Exonuclease 3'-5' domain-like-containing protein 2, EXD2 {ECO:0000303|PubMed:26807646, ECO:0000312|HGNC:HGNC:20217}

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

EXD2 Polyclonal Antibody - Protein Information**Name** EXD2 {ECO:0000303|PubMed:26807646, ECO:0000312|HGNC:HGNC:20217}**Function**

Exonuclease that has both 3'-5' exoribonuclease and exodeoxyribonuclease activities, depending on the divalent metal cation used as cofactor (PubMed:29335528, PubMed:31127291). In presence of Mg(2+), only shows 3'-5' exoribonuclease activity, while it shows both exoribonuclease and exodeoxyribonuclease activities in presence of Mn(2+) (PubMed:29335528, PubMed:31127291). Acts as an exoribonuclease in mitochondrion, possibly by regulating ATP production and mitochondrial translation (PubMed:29335528). Also involved in the response to DNA damage (PubMed:26807646, PubMed:31255466). Acts as 3'- 5' exodeoxyribonuclease for double-strand breaks resection and efficient homologous recombination

(PubMed:20603073, PubMed:26807646). Plays a key role in controlling the initial steps of chromosomal break repair, it is recruited to chromatin in a damage-dependent manner and functionally interacts with the MRN complex to accelerate resection through its 3'-5' exonuclease activity, which efficiently processes double-stranded DNA substrates containing nicks (PubMed:26807646). Also involved in response to replicative stress: recruited to stalled forks and is required to stabilize and restart stalled replication forks by restraining excessive fork regression, thereby suppressing their degradation (PubMed:31255466).

Cellular Location

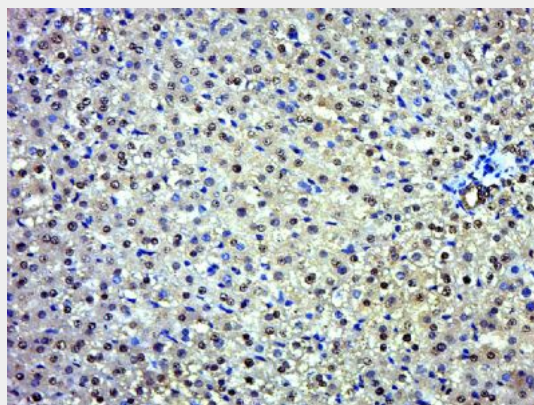
Mitochondrion outer membrane; Single-pass membrane protein {ECO:0000255, ECO:0000269|PubMed:31127291} Mitochondrion matrix. Nucleus. Chromosome. Note=Mainly localizes to the mitochondrial outer membrane (PubMed:29599527, PubMed:31127291). May translocate to the nucleus in response to DNA damage; however mechanism that explain nuclear localization are unknown and require experimental evidences (PubMed:26807646). Recruited to replication forks following replication stress (PubMed:31255466).

EXD2 Polyclonal Antibody - Protocols

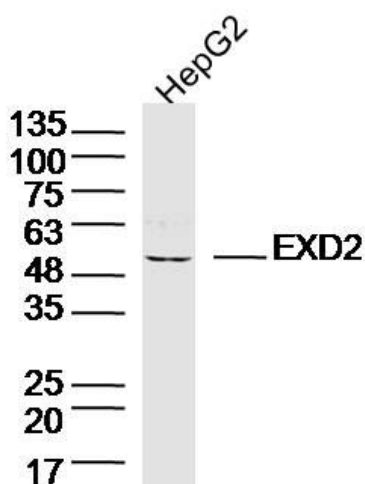
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

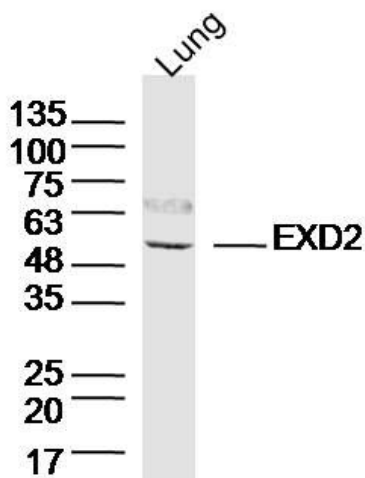
EXD2 Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (Rat liver); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (EXD2) Polyclonal Antibody, Unconjugated (bs-14654R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Sample: HepG2 (Human)Cell Lysate at 40 ug
Primary: Anti-EXD2(bs-14654R)at 1/300 dilution
Secondary: IRDye800CW Goat Anti-RabbitIgG at 1/20000 dilution
Predicted band size: 70kD
Observed band size: 56kD



Sample: Lung(Mouse)Lysate at 40 ug
Primary: Anti-EXD2(bs-14654R)at 1/300 dilution
Secondary: IRDye800CW Goat Anti-RabbitIgG at 1/20000 dilution
Predicted band size: 70kD
Observed band size: 56kD