# Human Nucleoredoxin Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF5719

## DESCRIPTION

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|---|---|
| **Species Reactivity** | Human |
| **Specificity** | Detects endogenous human Nucleoredoxin in Western blots. |
| **Source** | Polyclonal Goat IgG |
| **Purification** | Antigen Affinity-purified |
| **Immunogen** | *E. coli*-derived recombinant human NRX<br>Asn131-Ile435<br>Accession # Q6DKJ4 |
| **Formulation** | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

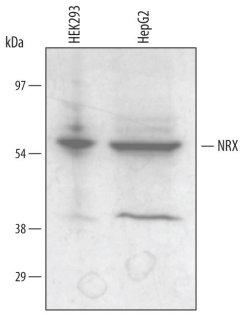
## APPLICATIONS

**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 |
|---|---|---|
| **Western Blot** | 1 µg/mL | See Below |

## DATA

**Western Blot**




**Detection of Human Nucleoredoxin by Western Blot.** Western blot shows lysates of HEK293 human embryonic kidney cell line and HepG2 human hepatocellular carcinoma cell line. PVDF membrane was probed with 1 µg/mL of Human Nucleoredoxin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5719) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for Nucleoredoxin at approximately 55 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.

## PREPARATION AND STORAGE

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| **Reconstitution** | Reconstitute at 0.2 mg/mL in sterile PBS. |
| **Shipping** | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.<br>*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| **Stability & Storage** | **Use a manual defrost freezer and avoid repeated freeze-thaw cycles.**<br>● 12 months from date of receipt, -20 to -70 °C as supplied.<br>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.<br>● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

## BACKGROUND

Nucleoredoxin (NRX; also known as NXN and Red-1) is a 51-55 kDa member of the thioredoxin (TXR) family of proteins. It is widely expressed, and exists in both the nucleus and cytoplasm of cells where it regulates two pathways. In the nucleus, NRX may act as a transcription factor in the Wnt-pathway; a stable (reduced) NRX binds to DVL, thereby blocking downstream Wnt/β-catenin signaling. It also binds to PP2A subunits $PP2A_C$ and $PP2A_A$, generating an active PP2A complex. Human NRX is 435 amino acids (aa) in length and contains a TXR domain (aa 167-321) that shows a WCPPC catalytic site, and a substrate recognition PDI-b' region (aa 312-427). There are three potential isoform variants. Over amino acids 131-435, human NRX shares 99% aa identity with mouse NRX.