# ARG59454
# anti-Peroxiredoxin 1 antibody

Package: 50 µg
Store at: -20°C

## Summary

| | |
|---|---|
| Product Description | Rabbit Polyclonal antibody recognizes Peroxiredoxin 1 |
| Tested Reactivity | Hu, Ms, Rat |
| Predict Reactivity | Hm |
| Tested Application | FACS, ICC/IF, IHC-P, WB |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | IgG |
| Target Name | Peroxiredoxin 1 |
| Species | Human |
| Immunogen | Synthetic peptide corresponding to aa. 100-128 of Human Peroxiredoxin 1. (MNIPLVSDPKRTIAQDYGVLKADEGISFR) |
| Conjugation | Un-conjugated |
| Alternate Names | EC 1.11.1.15; TDPX2; PAG; PRX1; MSP23; Natural killer cell-enhancing factor A; Peroxiredoxin-1; PRXI; NKEFA; PAGA; PAGB; Proliferation-associated gene protein; Thioredoxin peroxidase 2; NKEF-A; Thioredoxin-dependent peroxide reductase 2 |

## Application Instructions

Application table

| Application | Dilution |
|---|---|
| FACS | 1:150 - 1:500 |
| ICC/IF | 1:200 - 1:1000 |
| IHC-P | 0.5 - 1 µg/ml |
| WB | 0.1 - 0.5 µg/ml |

Application Note

IHC-P: Antigen Retrieval: By heat mediation.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

## Properties

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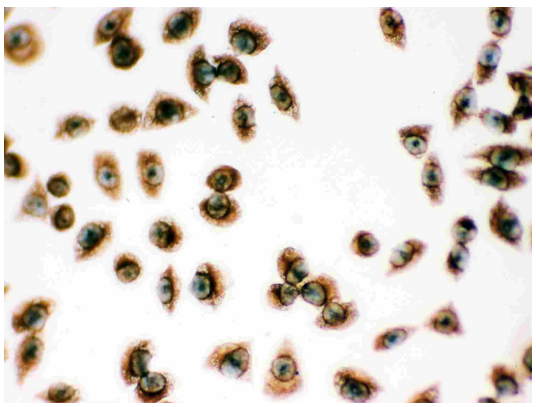
|---|---|
| Form | Liquid |
| Purification | Affinity purification with immunogen. |
| Buffer | 0.9% NaCl, 0.2% Na2HPO4, 0.05% Sodium azide and 5% BSA. |
| Preservative | 0.05% Sodium azide |
| Stabilizer | 5% BSA |

| | |
|---|---|
| Concentration | 0.5 mg/ml |
| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use. |
| Note | For laboratory research only, not for drug, diagnostic or other use. |

## Bioinformation

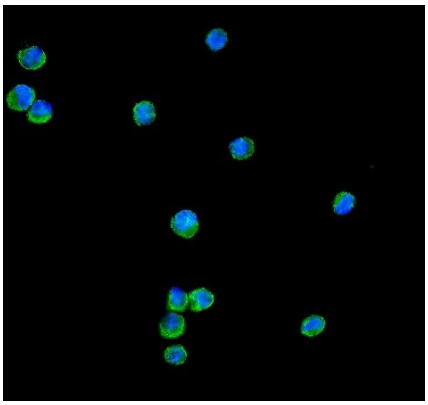
| | |
|---|---|
| Gene Symbol | PRDX1 |
| Gene Full Name | peroxiredoxin 1 |
| Background | This gene encodes a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. The encoded protein may play an antioxidant protective role in cells, and may contribute to the antiviral activity of CD8(+) T-cells. This protein may have a proliferative effect and play a role in cancer development or progression. Four transcript variants encoding the same protein have been identified for this gene. [provided by RefSeq, Jan 2011] |
| Function | Involved in redox regulation of the cell. Reduces peroxides with reducing equivalents provided through the thioredoxin system but not from glutaredoxin. May play an important role in eliminating peroxides generated during metabolism. Might participate in the signaling cascades of growth factors and tumor necrosis factor-alpha by regulating the intracellular concentrations of H(2)O(2). Reduces an intramolecular disulfide bond in GDPD5 that gates the ability to GDPD5 to drive postmitotic motor neuron differentiation (By similarity). [UniProt] |
| Calculated Mw | 22 kDa |
| PTM | Phosphorylated on Thr-90 during the M-phase, which leads to a more than 80% decrease in enzymatic activity. [UniProt] |
| Cellular Localization | Cytoplasm. Melanosome. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV. [UniProt] |

## Images



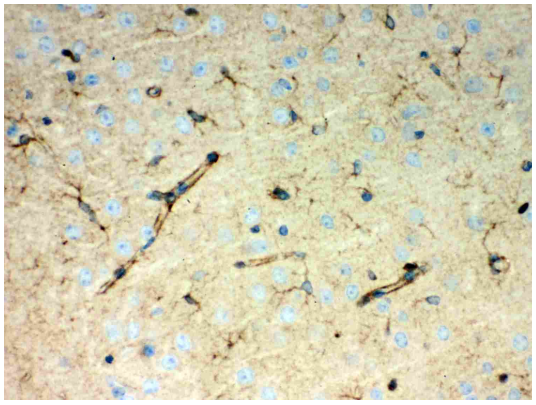
ARG59454 anti-Peroxiredoxin 1 antibody ICC image

Immunocytochemistry: SMMC-7721 cells stained with ARG59454 anti-Peroxiredoxin 1 antibody.



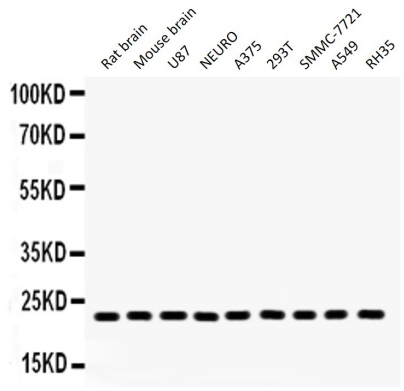
ARG59454 anti-Peroxiredoxin 1 antibody ICC/IF image

Immunofluorescence: HeLa cells were blocked with 10% goat serum and then stained with ARG59454 anti-Peroxiredoxin 1 antibody (green) at 2 µg/ml dilution, overnight at 4°C. DAPI (blue) for nuclear staining.



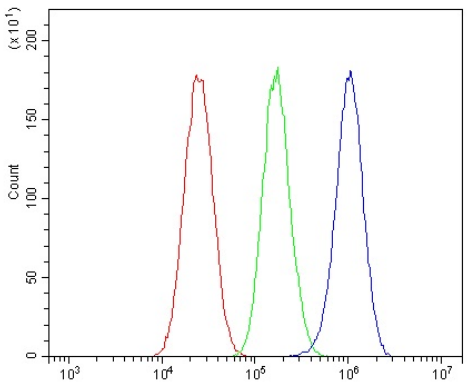
ARG59454 anti-Peroxiredoxin 1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse brain stained with ARG59454 anti-Peroxiredoxin 1 antibody.



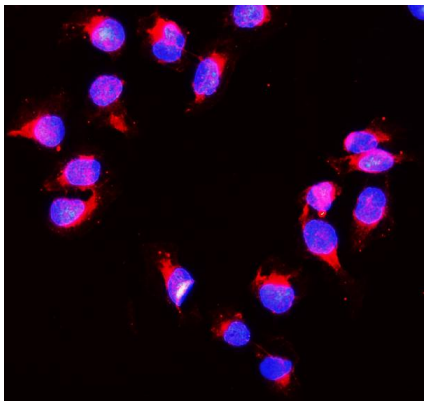

ARG59454 anti-Peroxiredoxin 1 antibody WB image

Western blot: 50 µg of Rat brain, 50 µg of Mouse brain, 40 µg of U87, 40 µg of NEURO, 40 µg of A375, 40 µg of 293T, 40 µg of SMMC-7721, 40 µg of A549 and 40 µg of RH35 whole cell lysates stained with ARG59454 anti-Peroxiredoxin 1 antibody at 0.5 µg/ml dilution.



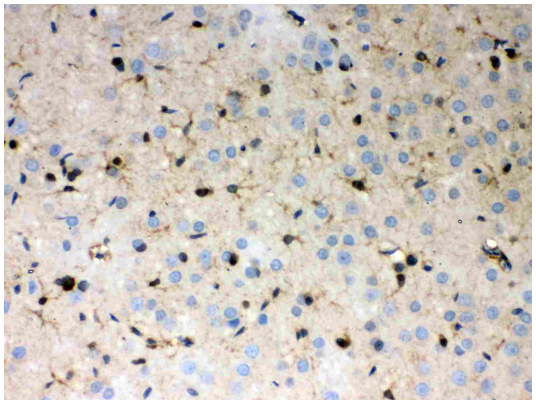

ARG59454 anti-Peroxiredoxin 1 antibody FACS image

Flow Cytometry: HepG2 cells were blocked with 10% normal goat serum and then stained with ARG59454 anti-Peroxiredoxin 1 antibody (blue) at 1 µg/10^6 cells for 30 min at 20°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (green) was rabbit IgG (1 µg/10^6 cells) used under the same conditions. Unlabelled sample (red) was also used as a control.



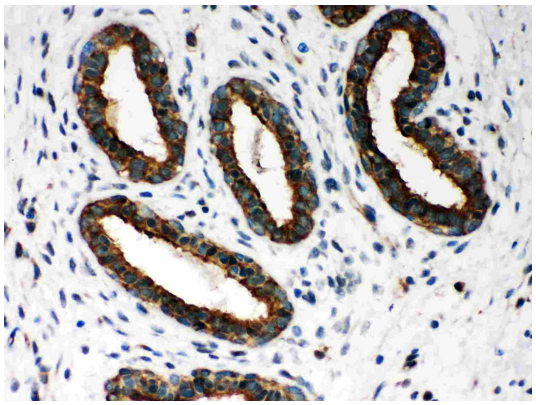
ARG59454 anti-Peroxiredoxin 1 antibody ICC/IF image

Immunofluorescence: U2OS cells were blocked with 10% goat serum and then stained with ARG59454 anti-Peroxiredoxin 1 antibody (red) at 2 µg/ml dilution, overnight at 4°C. DAPI (blue) for nuclear staining.



ARG59454 anti-Peroxiredoxin 1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat brain stained with ARG59454 anti-Peroxiredoxin 1 antibody.



ARG59454 anti-Peroxiredoxin 1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human mammary cancer stained with ARG59454 anti-Peroxiredoxin 1 antibody.