# CALR Ab

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| Cat.#: DF6211 | Concn.: 1mg/ml | Mol.Wt.: 60kDa |
| Size: 100ul,200ul | Source: Rabbit | Clonality: Polyclonal |

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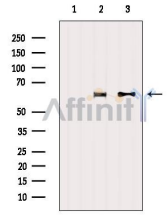
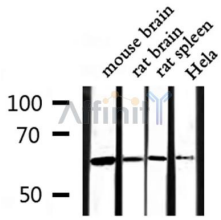
| Application: | WB 1:500-1:2000 IHC 1:50-1:200, IF/ICC 1:100-1:500 |
| Reactivity: | Human,Mouse,Rat,Monkey |
| Purification: | The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific). |
| Specificity: | CALR Ab detects endogenous levels of total CALR. |
| Immunogen: | A synthesized peptide derived from human CALR. |
| Uniprot: | P27797 |
| Description: | Calcium is a universal signaling molecule involved in many cellular functions such as cell motility, metabolism, protein modification, protein folding and apoptosis. Calcium is stored in the endoplasmic reticulum (ER), where it is buffered by calcium binding chaperones such as calnexin and calreticulin, and is released via the IP3 Receptor (1). Calreticulin also functions as an ER chaperone that ensures proper folding and quality control of newly synthesized glycoproteins. As such, calreticulin presumably does not alter protein folding but ensures proper timing for efficient folding and subunit assembly. Furthermore, calreticulin retains proteins in non-native conformation within the ER and targets them for degradation (2,3). |
| Subcellular Location: | Endoplasmic reticulum lumen. Cytoplasm > cytosol. Secreted > extracellular space > extracellular matrix. Cell surface. Also found in cell surface (T cells), cytosol and extracellular matrix. Associated with the lytic granules in the cytolytic T-lymphocytes. |
| Similarity: | Can be divided into a N-terminal globular domain, a proline-rich P-domain forming an elongated arm-like structure and a C-terminal acidic domain. The P-domain binds one molecule of calcium with high affinity, whereas the acidic C-domain binds multiple calcium ions with low affinity.The interaction with glycans occurs through a binding site in the globular lectin domain.The zinc binding sites are localized to the N-domain.Associates with PDIA3 through the tip of the extended arm formed by the P-domain.Belongs to the calreticulin family. |
| Storage Condition and | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM |

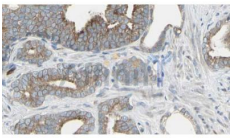
Buffer: NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt.




Western blot analysis of extracts from various samples, using CALR Ab.
Lane 1: Hela, treated with blocking peptide;
Lane 2: Hela;
Lane 3: COS-7.




Western blot analysis of extracts from mouse brain, rat brain, rat spleen, Hela, using CALR Ab.



DF6211 at 1/100 staining Human prostate tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the Ab for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.

DF6211 staining Hela cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25°C. The primary Ab was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab(Red), diluted at 1/600, was used as secondary Ab.

*IMPORTANT:* For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.