Bio Academia
Manufacturer

AS ONE

Anti-Calreticulin/ CALR Antibody, Rabbit Polyclonal

Catalog # 73-018 100 µl

Calreticulin (CALR) is calcium-binding chaperone that promotes folding, oligomeric assembly and quality control in the endoplasmic reticulum (ER) via the calreticulin/calnexin cycle. This lectin interacts transiently with almost all of the monoglucosylated glycoproteins that are synthesized in the ER. Interacts with the DNA-binding domain of NR3C1 and mediates its nuclear export. Involved in maternal gene expression regulation. May participate in oocyte maturation via the regulation of calcium homeostasis CALR consists of 416 amino acids with molecular mass of 48 kDa

Applications

Western Blot 1:1000 dilution

Immunoprecipitation 1:100 dilution

Other applications not tested

Specification

Immunogen: C-EEDEKEEDEEESPGQAKDEL (C-terminal of mouse CALR protein)

Reactivity: Mouse. Not tested in other species.

Form: Whole rabbit serum added with 0.09% sodium azide.

Storage: Shipped at 4°C. Upon arrival, spin-down and store at 4°C short term or -20°C long term.

Data Link

uniprot/P14211 mouse Calrecticulin

Gene I D 12317 mouse Calr

Reference: This antibody was described and used in the following publication.

Ikawa M. et al (2011) Calsperin is a testis-specific chaperone required for sperm fertility. J Biol Chem.18:5639-46. pubmed/21131354

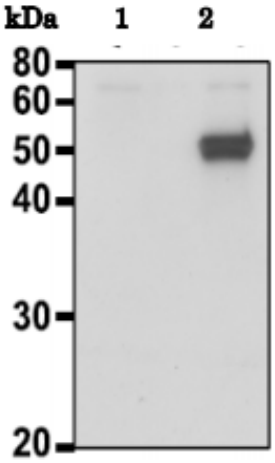

Fig.1 Identification of CALR protein by Western blot with anti-CALR antibody. Embryonic fibroblast cells prepared from Calr -/- mouse were transfected with a plasmid expressing Calr. The cell lysate was analyzed by Western blot with anti-CALR antibody at 1/500 dilution. 1. Mock-infected cell lysate as a negative control. 2. Cell lysate transfected with a plasmid expressing Ca

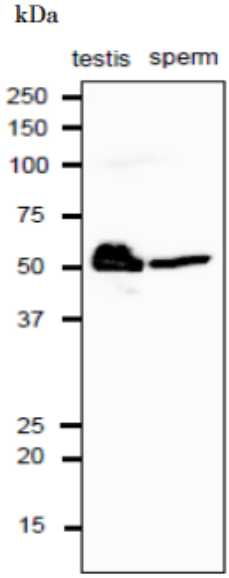

Fig.2 Western blot analysis of CALR protein in crude extracts of mouse testis and sperm with anti-CALR antibody. Proteins in the extracts (10 µg protein) were separated on 10-20% gradient gel of SDS-PAGE and electro-blotted to a PVDF membrane. The membrane was reacted with anti-CALR antibody at 1/1,000 dilution. As the 2nd antibody, anti-rat IgG antibody conjugated with HRP (ab97051) was used at 1/10,000 dilution

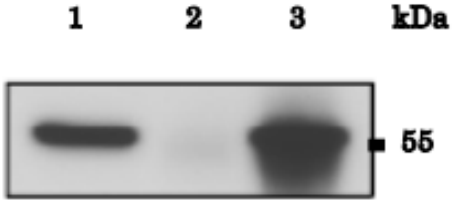

Fig.3. Immunoprecipitation of CALR protein with anti-CALR antibody. Lysates of wild-type mouse testis were immunoprecipitated with anti-CALR antibody and the precipitates were analyzed by Western blot with the same antibody. 1. Input testis lysate 2. Precipitated with preimmune serum 3. Precipitated with anti-CALR antibody