

# ERdj3 (H-130): sc-99208

## BACKGROUND

Members of the heat shock protein 40 (HSP 40) family of proteins all contain a highly conserved J domain that associates with HSP 70 and regulates the function of HSP 70 by activating its adenosine triphosphatase activity. ERdj3, an HSP 40 chaperone, is expressed in the ER lumen, where it interacts with BiP, a molecule involved in retrotranslocating proteins out of the ER. ERdj3 also associates with several other protein substrates, including unfolded light chains, a nonsecreted Ig light chain mutant and a VSV-G ts045 mutant. Shiga toxin (Stx) is a bacterial tool that enzymatically inactivates the 28S rRNA, inhibiting protein synthesis of infected cells. Stx also interacts with ERdj3 and Sec 61 to form a complex through which proteins are retrotranslocated to the cytoplasm. ERdj3 may play a role in the ER quality control system.

## REFERENCES

1. Yu, M., et al. 2000. HEDJ, an HSP 40 co-chaperone localized to the endoplasmic reticulum of human cells. *J. Biol. Chem.* 275: 24984-24992.
2. Meunier, L., et al. 2002. A subset of chaperones and folding enzymes form multiprotein complexes in endoplasmic reticulum to bind nascent proteins. *Mol. Biol. Cell* 13: 4456-4469.

## CHROMOSOMAL LOCATION

Genetic locus: DNAJB11 (human) mapping to 3q27.3; Dnajb11 (mouse) mapping to 16 B1.

## SOURCE

ERdj3 (H-130) is a rabbit polyclonal antibody raised against amino acids 106-235 mapping within an internal region of ERdj3 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

ERdj3 (H-130) is recommended for detection of mature ERdj3 and DnaJ B11 precursor of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ERdj3 (H-130) is also recommended for detection of mature ERdj3 and DnaJ B11 precursor in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ERdj3 siRNA (h): sc-60595, ERdj3 siRNA (m): sc-60596, ERdj3 shRNA Plasmid (h): sc-60595-SH, ERdj3 shRNA Plasmid (m): sc-60596-SH, ERdj3 shRNA (h) Lentiviral Particles: sc-60595-V and ERdj3 shRNA (m) Lentiviral Particles: sc-60596-V.

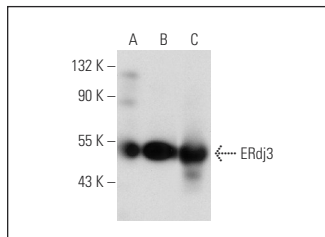
Molecular Weight of ERdj3: 40 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, HeLa whole cell lysate: sc-2200 or ERdj3 (h): 293T Lysate: sc-173247.

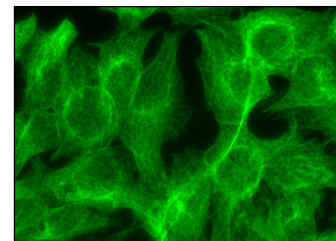
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



ERdj3 (H-130): sc-99208. Western blot analysis of ERdj3 expression in non-transfected 293T: sc-117752 (A), human ERdj3 transfected 293T: sc-173247 (B) and Hep G2 (C) whole cell lysates.



ERdj3 (H-130): sc-99208. Immunofluorescence staining of formalin-fixed Hep G2 cells showing cytoplasmic localization.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **ERdj3 (C-7): sc-271240**, our highly recommended monoclonal alternative to ERdj3 (H-130).