

#### **Cpn10 Antibody**

Catalog # ASM10452

# **Specification**

# **Cpn10 Antibody - Product Information**

Application IHC, WB
Primary Accession P61604
Other Accession NP\_002148.1
Host Rabbit

Reactivity Human, Mouse, Rat, Rabbit, Pig, Bovine,

Xenopus, Dog, Sheep, Guinea Pig

Polycional APC

**Description** 

Clonality

**Format** 

Rabbit Anti-Human Cpn10 Polyclonal

**Target/Specificity** Detects ~ 10kDa.

#### **Other Names**

10kDa Chaperonin Antibody, Chaperonin 10 Antibody, Cpn 10 Antibody, EPF Antibody, GROES Antibody, Heat Shock 10kD protein1 Antibody, HSP10 Antibody, HSPE1 Antibody

#### **Immunogen**

Human Cpn10 peptide AA 91-101

**Purification**Protein A Purified

Storage -20°C

**Storage Buffer** 

PBS pH7.3, 0.02% sodium azide

Shipping Temperature Blue Ice or 4°C

**Certificate of Analysis** 

 $1 \mu g/ml$  of SPC-193 was sufficient for detection of Cpn10 in 10  $\mu g$  of Hela lysates by colorimetric immunoblot analysis using Goat anti-rabbit IgG:HRP as the secondary antibody.

## **Cellular Localization**

Mitochondrion | Mitochondrion Matrix

## **Cpn10 Antibody - Protocols**

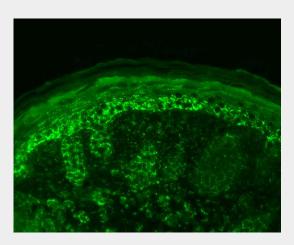
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

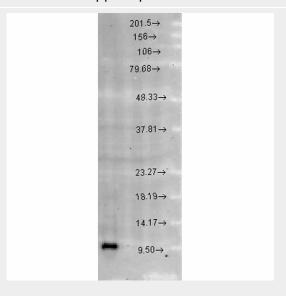


- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

#### Cpn10 Antibody - Images



Immunohistochemistry analysis using Rabbit Anti-Cpn10 Polyclonal Antibody (ASM10452). Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative Solution. Primary Antibody: Rabbit Anti-Cpn10 Polyclonal Antibody (ASM10452) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Rabbit (green) at 1:50 for 1 hour at RT. Localization: Strong basal layer punctate staining in the cytoplasm, weakens as it ascends to upper epidermis..

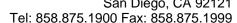


Western blot analysis of Rat brain cell lysates showing detection of Cpn10 protein using Rabbit Anti-Cpn10 Polyclonal Antibody (ASM10452). Load: 15 µg protein. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Rabbit Anti-Cpn10 Polyclonal Antibody (ASM10452) at 1:1000 for 2 hours at RT. Secondary Antibody: Donkey Anti-Rabbit IgG: HRP for 1 hour at RT.

# Cpn10 Antibody - Background

Chaperonin 10, otherwise known as Cpn10, (groES in E.coli) make up a family of small heart shock proteins with an approximate molecular mass of 10kDa (HSP10s). Cpn10 acts as a co-chaperone and interacts with the HSP60 family to promote proper folding of polypeptides. Cpn10 and Cpn60 both exhibit sevenfold axis of symmetry and function as a team in the protein folding and assembly process (1). Cpn10 has been located in human platelets, but is also present in human maternal







serum (2, 3). It has been reported that human Cpn10 is identical with early pregnancy factor, which is involved in control over cell growth and development. This identification suggest that Cpn10 may act like a hormone in stressful situations such as pregnancy (4).

# **Cpn10 Antibody - References**

- 1. Velez-Granell C.S., et al. (1994) J of Cell Science. 107(3): 539-549.
- 2. Morton H., Hegh V., and Clunie G.J.A. (1974) Nature (London) 249: 459-460.
- 3. Cavanagh A.C., and Morton H. (1994) Eur. J. Biochem. 222: 551-560.
- 4. Minto M., et al. (1998) Molecular Cell Research. 1403 (2): 151-157.