Datasheet for ABIN1580425

anti-HSP27 antibody

Go to Product page

Overview

Quantity:	100 µL
Target:	HSP27
Reactivity:	Human, Cow, Mouse, Pig, Rat, Mammalian
Host:	Chicken
Clonality:	Polyclonal
Conjugate:	This HSP27 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunocytochemistry (ICC), Immunofluorescence (IF)

Product Details

Isotype:	IgY
Purification:	IgY preparation

Target Details

Target:	HSP27
Alternative Name:	Heat Shock Protein 27 HSP27 (HSP27 Products)
Background:	The heat shock proteins were discovered, as the name suggests, since they are heavily upregulated when cells are stressed by temperatures above the normal physiological range. They are expressed in unstressed cells also and have a normal function as chaperones, helping other proteins to fold correctly, and are required in much greater amounts if the cell or tissue is stressed by heat. The increased levels are generated transcriptionally under the influence of a

Target Details

	powerful transcription factor, the heat shock factor 1 (HSF1). The different heat shock proteins were originally named based on their SDS-PAGE mobility, so HSP27 has an an apparent molecular weight of 27 kDa. It is an abundant protein even under non-stress conditions and frequently shows up as a major spot on 2 dimensional gels of cells or tissues. It is known to associate with a variety of other proteins such as actin, intermediate filament subunits and ubiquitin and is found both in the cytoplasm and the nucleus of cells. HSP27 can become heavily phosphorylated under the influence of multiple protein kinases particularly as a result of activation of the p38/SAPK pathway. Upregulation of this protein is protective against neurodegenerative diseases at least in certain mouse models. Point mutations in the HSP27 gene are associated with two neurological diseases, Charcot-Marie-Tooth disease type 2F and distal hereditary motor neuropathy IIB. These diseases are associated with axonal loss apparently following defects in the transport of neurofilaments. The HGNC name for this protein is HSBP1.
Pathways:	VEGF Signaling

Application Details

Application Notes:	The antibody solution can be used at dilutions of at least 1:2,000 in immunofluorescence experiments. In western blotting using chemiluminescence it can be used at dilutions of 1:5,000 or lower.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	20 mg/mL
Buffer:	This antibody is an IgY prep at a total protein concentration of 20mg/mL. The preparation contains 10mM sodium azide as a preservative.
Preservative:	Sodium azide
Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	Store at 4°C short term or -20°C long term.