

Anti-P53DINP1 Antibody, clone F8 clone F8, from rat

Art. ID	SAF-MABC1167
Unit	EA
Deliverydetails	No Dangerous Good

Description

Tumor protein p53-inducible nuclear protein 1 (UniProt: Q96A56, also known as Stress-induced protein, p53-dependent damage-inducible nuclear protein 1, p53DINP1) is encoded by the TP53INP1 (also known as P53DINP1, SIP) gene (GeneID: 94241) in human. p53DINP1 is a ubiquitously expressed protein with anti-proliferative and pro-apoptotic properties and is involved in cell stress response. It shuttles between the nucleus and the cytoplasm, depending on cellular stress conditions. It acts as a dual regulator of transcription and autophagy. p53DINP1 acts as a positive regulator of autophagy and in response to cellular stress or upon activation of autophagy, it relocates to autophagosomes where it interacts with autophagosome-associated proteins GABARAP, GABARAPL1/L2, MAP1LC3A/B/C to regulate autophagy. p53DINP1 also acts as an antioxidant and plays a major role in p53/TP53-driven oxidative stress response. It has both a p53/TP53-independent intracellular reactive oxygen species (ROS) regulatory function and a p53/TP53-dependent transcription regulatory function. p53DINP1 is reported to positively regulate p53/TP53 and p73/TP73 and stimulate their capacity to induce apoptosis. In response to double-strand DNA breaks, it promotes p53/TP53 phosphorylation on Ser46 and subsequent apoptosis. It is shown to act as a tumor suppressor by inducing cell death by an autophagy and caspase-dependent mechanism.