

**Mouse Anti-Survivin [D8]: MC0256, MC0256RTU7**

**Intended Use:** For Research Use Only

**Description:** Survivin is a unique member of the inhibitor of apoptosis (IAP) protein family that interferes with post-mitochondrial events including activation of caspases. Survivin regulates the cell cycle and is expressed in most tumors, but it is barely detectable in terminally differentiated normal cells and tissues. Survivin is expressed in the G2/M phase of the cell cycle. At the beginning of mitosis, survivin associates with microtubules of the mitotic spindle in a specific and saturable reaction that is regulated by microtubule dynamics. Disruption of survivin-microtubule interactions results in loss of survivin's anti-apoptotic function and increased caspase-3 activity, a mechanism involved in cell death during mitosis. Nuclear-cytoplasmic shuttling of survivin is controlled by nuclear export signal (NES), which is necessary for the anti-apoptotic function of survivin. Inhibition of the NES makes cells more susceptible to chemotherapy- or radiotherapy-induced apoptosis. The association of survivin expression with tumor progression, but not overall patient survival, has been observed in a variety of malignancies including renal cell carcinoma, ovarian carcinoma, hepatocellular carcinoma, prostate carcinoma and breast carcinoma. However, the link between a poor prognosis and nuclear expression of Survivin in tumors is controversial.

**Specifications**

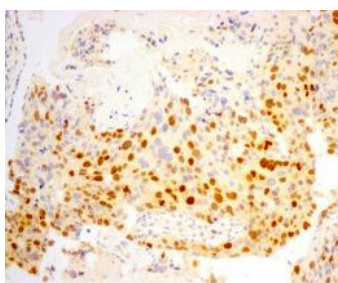
Clone: D8  
 Source: Mouse  
 Isotype: IgG2a/k  
 Reactivity: Human, mouse, rat  
 Immunogen: Peptide aa 1-142 of human survivin  
 Localization: Cytoplasm, nucleus and/or membrane  
 Formulation: Antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, ELISA, ICC/IF, IP, WB  
 Package:

Description	Catalog No.	Size
Survivin Concentrated	MC0256	1 ml
Survivin Prediluted	MC0256RTU7	7 ml

**IHC Procedure**

Positive Control Tissue: Colon cancer, NSCLC, HCC, clear cell RCC, lobular breast cancer  
 Concentrated Dilution: 50-200  
 Pretreatment: Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human NSCLC stained with anti-Survivin using DAB

**References:**

- Survivin DEx3 as a biomarker of thyroid cancers: A study at the mRNA and protein level. Waligórska-Stachura J, et al. *Oncol Lett* 13:2437-2441, 2017.
- Survivin downregulation using siRNA nanoliposomes inhibits cell proliferation and promotes the apoptosis of MHCC-97H hepatic cancer cells: Liu Z, et al. An in vitro and in vivo study. *Oncol Lett* 13:2723-2730, 2017.

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