

Product datasheet for **TA336666**

BIRC5 Mouse Monoclonal Antibody [Clone ID: 8E2]

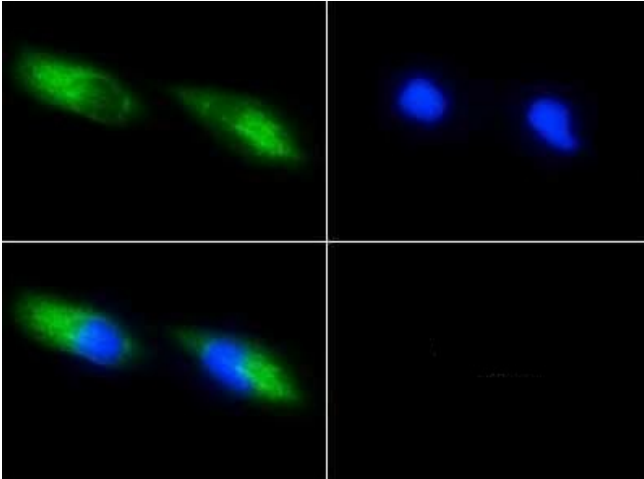
Product data:

Product Type:	Primary Antibodies
Clone Name:	8E2
Applications:	Block/Neutralize, ELISA, FC, ICC/IF, IHC
Recommended Dilution:	Block/Neutralize, ELISA, Flow Cytometry: 1 ug/mL, Flow (Intracellular), Immunohistochemistry: 1:100, Immunocytochemistry/ Immunofluorescence: 1:50-1:100, Immunohistochemistry-Paraffin: 1:100, In vitro assay
Reactivity:	Human, Rat
Host:	Mouse
Isotype:	IgG1, kappa
Clonality:	Monoclonal
Immunogen:	Full length recombinant human Survivin [UniProt# O15392]
Formulation:	PBS containing 0.05% BSA, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	Protein G purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	baculoviral IAP repeat containing 5
Database Link:	NP_001159 Entrez Gene 64041 Rat Entrez Gene 332 Human O15392

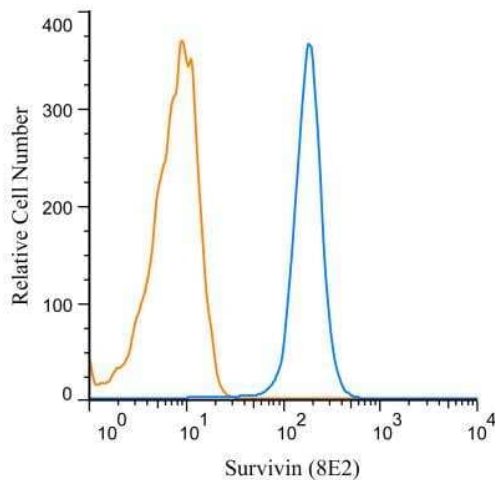


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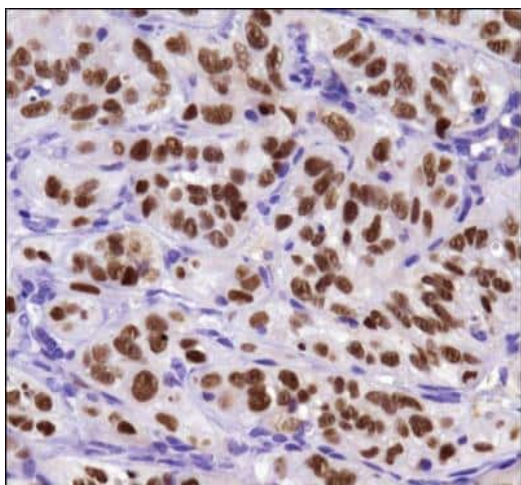
Background:	Survivin (BIRC5 or IAP4) is the smallest member of inhibitors of apoptosis proteins (X-linked IAP/XIAP, c-IAP1, c-IAP2, IAP-like protein-2/ ILP2, melanoma IAP/ ML-IAP, Livin, NAIP, and survivin) and besides its anti-apoptotic functions; survivin also regulates processes such as cell cycle, migration, metastasis etc. Highly critical in fetal development, survivin is generally no longer present in adult tissues; however, its re-expression occurs in cancers wherein it drives proliferation, metastasis, poor prognosis, and decreased patient survival. Survivin contains only one copy of a modified baculovirus IAP repeat (BIR, a domain required for caspases inactivation) which is used for homodimerization and for its interaction with other chromosome passenger proteins. Phosphorylation/mutation of Thr-48 in the BIR domain affects survivin's dual ability to inhibit apoptosis and regulate cell division. Under apoptotic stimuli involving mitochondria, survivin forms a complex with XIAP, thus increasing the stability of XIAP and its inhibitory activity against caspases. The survivin binding to mitochondrial Smac/DIABLO leads to a delayed Smac/DIABLO release in the cytoplasm resulting in prolonged cell survival. Survivin-HBXIP complex can bind to pro-caspase-9 for exerting prevention of mitochondrial apoptosis activation. For facilitating correct cell division, survivin recognize/complex with phospho-histone-H3 and associates with the chromosome passenger proteins (Aurora B, INCENP, and borealin) and this new complex is recruited to the mitotic centromeres where it assists/ensure proper chromosomal segregation. Moreover, at the centrosomes of dividing cells, survivin binds to Cdk1 which is critical for cells to enter mitosis.
Synonyms:	API4; EPR-1
Note:	This Survivin Antibody (8E2) is useful for Immunocytochemistry, Immunofluorescence and Immunohistochemistry on paraffin embedded sections. For IHC, heat induced antigen retrieval using citrate buffer is required. In vitro assay, Blocking/Neutralizing, ELISA, Western Blot, and Flow Cytometry were reported in scientific literature.
Protein Families:	Druggable Genome, Stem cell - Pluripotency
Protein Pathways:	Colorectal cancer, Pathways in cancer

Product images:

Immunocytochemistry/Immunofluorescence:
Survivin Antibody (8E2) TA336666 -
Immunocytochemical analysis using Survivin
Antibody (8E2) TA336666 was tested in HeLa cells
with FITC (green). Nuclei were counterstained
with DAPI (blue).



Flow (Intracellular): Survivin Antibody (8E2)
TA336666 - An intracellular stain was performed
on Daudi cells with Survivin Antibody (8E2)
TA336666 (blue) and a matched isotype control
NBP2-27287 (orange). Cells were fixed with 4%
PFA and then permeabilized with 0.1% saponin.
Cells were incubated in an antibody dilution of 1
ug/mL for 30 minutes, followed by mouse F(ab)₂
IgG (H+L) APC-conjugated secondary antibody
(F0101B, R&D Systems).



Immunohistochemistry: Survivin Antibody (8E2) TA336666 - Immunohistochemical analysis of Survivin in human breast cancer tissue using Survivin Antibody (8E2) TA336666 and DAB with hematoxylin counterstain.