

Mouse Anti-TOX3/TNRC9 [TOX3/1123]: MC0098, MC0098RTU7

Intended Use: For Research Use Only

Description: It recognizes a 63kDa protein, which is identified as TOX3. It contains a high mobility group (HMG)-box, which regulates Ca²⁺-dependent transcription in neurons through interaction with the cAMP-response-element-binding protein (CREB). TOX3 appears to be associated with breast cancer susceptibility and is expressed downstream of a cytoprotective cascade together with CITED1, a transcriptional regulator that does not bind directly to DNA. TOX3 is predominantly expressed in the brain and forms homodimers. TOX3 overexpression protects neuronal cells from cell death caused by endoplasmic reticulum stress or BAX overexpression through the induction of anti-apoptotic transcripts and repression of pro-apoptotic transcripts.

Specifications

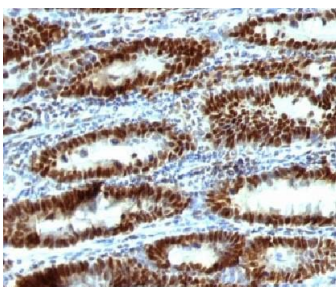
Clone: TOX3/1123
 Source: Mouse
 Isotype: IgG2b/k
 Reactivity: Human
 Localization: Cytoplasm, nucleus
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC, Flow Cyt, ICC/IF
 Package:

Description	Catalog No.	Size
TOX3/TNRC9 Concentrated	MC0098	1 ml
TOX3/TNRC9 Prediluted	MC0098RTU7	7 ml

IHC Procedure*

Positive Control Tissue: Brain, breast or gastric Carcinoma, SH-SY5Y, MD A-MB-435 cells.
 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 gastric carcinoma stained with anti-TOX3 using DAB

References

1. IL-1 α Gene Deletion Protects Oligodendrocytes after Spinal Cord Injury through Upregulation of the Survival Factor Tox3. Bastien D, et al. J Neurosci. Jul 29;35(30):10715-30, 2015.
2. TOX3 regulates calcium-dependent transcription in neurons. Yuan SH, et al. Proc Natl Acad Sci U S A. Feb 24;106(8): 2909-14, 2009.
3. Genes associated with breast cancer metastatic to bone. Smid, M., et al. J. Clin. Oncol. 24: 2261-2267, 2006.
4. TOX defines a conserved subfamily of HMG-box proteins. O'Flaherty, E., et al. BMC Genomics 4: 13, 2003.