

GBX2 / Gastrulation Brain Homeobox 2 Antibody

Mouse Monoclonal Antibody [Clone GBX2/7235]

Catalog No	Format	Size
2637-MSM5-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
2637-MSM5-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
2637-MSM5-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

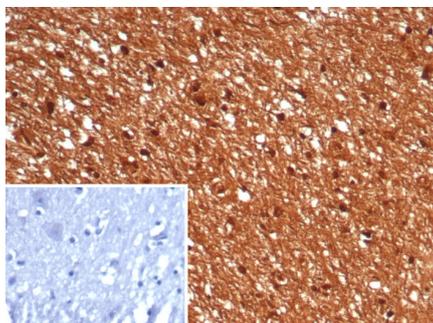
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

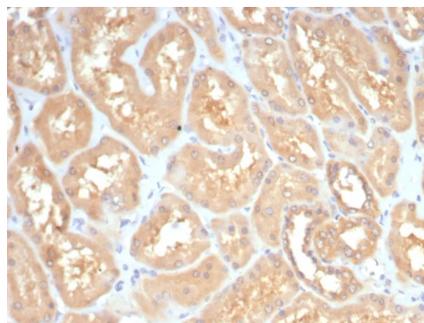
Clone	GBX2/7235
Gene Name	GBX2
Immunogen	Recombinant fragment (around aa150-350) of human GBX2 protein (exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2 / Kappa
Mol. Weight of Antigen	37kDa
Cellular Localization	Nucleus.
Species Reactivity	Human
Positive Control	Human placenta or brain.

*Optimal dilution for a specific application should be determined.

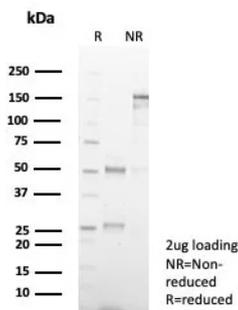
Product Images for GBX2 / Gastrulation Brain Homeobox 2 Antibody



Formalin-fixed, paraffin-embedded human brain stained with GBX2 Mouse Monoclonal Antibody (GBX2/7235). Inset: PBS instead of primary antibody; secondary only negative control.



Formalin-fixed, paraffin-embedded human kidney stained with GBX2 Mouse Monoclonal Antibody (GBX2/7235). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.



SDS-PAGE Analysis of Purified GBX2 Mouse Monoclonal Antibody (GBX2/7235).
Confirmation of Purity and Integrity of Antibody.

Specificity & Comments

The isthmic organizer signals at the mid/hindbrain boundary (MHB) regulate the development and differentiation of the vertebrate caudal midbrain and the anterior hindbrain. The MHB forms at the boundary of expression between homeobox genes GBX2 and OTX2. GBX2 and OTX2 play distinct, essential roles in MHB positioning and development. During development, the GBX2 gene is expressed in the anterior hindbrain. Specifically, GBX2 negatively regulates OTX2 expression along the anterior-posterior axis; GBX2- mutants demonstrate an expanded OTX2 domain. During development, the GBX2 gene is expressed in the anterior hindbrain. GBX2 is expressed in the adult brain, spleen and female genital tract. The GBX2 gene is overexpressed in human prostate cancer cell lines (TSU-pr1, PC3, DU145 and LNCaP). Furthermore, downregulation of GBX2 expression restricts tumorigenicity in human prostate cancer cell lines, which suggests that GBX2 expression may be required for growth of malignant prostate cells.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Cardiovascular, Stem Cell Differentiation