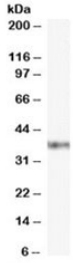
GBX2 Antibody / Developmental Patterning Protein Antibody (R35273)

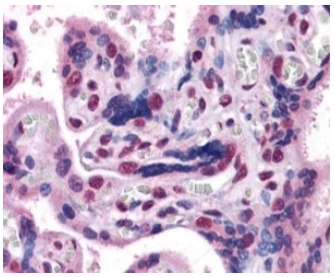
Catalog No.	Formulation	Size
R35273-100UG	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Mouse, Rat, Dog, Pig, Cow
Format	Antigen affinity purified
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	2637
Applications	Western blot: 0.1-0.3ug/ml Immunohistochemistry (FFPE): 4-8ug/ml ELISA (peptide) LOD: 1:16000
Limitations	This GBX2 Antibody / Developmental Patterning Protein Antibody is available for research use only.



GBX2 Antibody Jurkat WB. Western blot analysis of Jurkat cell lysate using GBX2 Antibody / Developmental Patterning Protein Antibody demonstrates a distinct band at approximately 37 kDa, consistent with the predicted molecular weight of Gastrulation brain homeobox 2 / GBX2, a developmental homeobox transcription factor involved in embryonic patterning and lineage-associated transcriptional regulation. The observed expression pattern supports the role of GBX2 in developmental signaling and tissue differentiation-associated regulatory pathways.



GBX2 Antibody Placenta IHC. Immunohistochemistry analysis of FFPE human placenta tissue stained with GBX2 Antibody / Developmental Patterning Protein Antibody demonstrates prominent nuclear AP-blue staining within trophoblast-associated cellular populations, consistent with the role of Gastrulation brain homeobox 2 / GBX2 in embryonic development and tissue differentiation-associated transcriptional regulation. The observed nuclear localization pattern aligns with the established function of GBX2 as a developmental homeobox transcription factor involved in embryonic patterning pathways. HIER: steamed with pH 6 citrate buffer. AP-based detection chemistry was used for visualization.

Description

Gastrulation brain homeobox 2 (GBX2) is a developmental homeobox transcription factor involved in embryonic patterning, tissue differentiation, and lineage-associated transcriptional regulation. The GBX2 Antibody / Developmental Patterning Protein Antibody is designed for detection of GBX2 expression in studies involving embryogenesis, developmental signaling, placental biology, and tissue organization-associated regulatory pathways.

GBX2 is encoded by the GBX2 gene on chromosome 2q37 and belongs to the gastrulation brain homeobox family of developmental regulatory proteins. The protein localizes predominantly within the nucleus where it regulates transcriptional programs involved in embryonic tissue specification and regional developmental identity. GBX2 expression is particularly important during early developmental stages and contributes to coordinated regulation of differentiation-associated signaling pathways.

Developmental signaling involving GBX2 is closely linked to embryonic morphogenesis, neural-associated patterning, and tissue-specific differentiation programs. The protein functions together with additional developmental regulators including OTX2, fibroblast growth factor signaling components, WNT-associated pathways, and other homeobox transcription factors involved in coordinated embryologic organization and lineage specification.

In addition to central nervous system-associated developmental biology, GBX2 has attracted interest in broader embryonic tissue regulation and placental-associated differentiation studies. Expression of developmental homeobox proteins within placental and embryonic tissue environments reflects coordinated transcriptional programs governing tissue maturation, developmental signaling, and lineage-associated cellular identity. Because GBX2 participates in tightly regulated developmental pathways, the protein is commonly studied alongside markers of embryogenesis and tissue patterning.

Western blot analysis using GBX2 antibodies commonly demonstrates bands corresponding to endogenous GBX2 protein in developmentally regulated cellular systems, while immunohistochemical staining may reveal nuclear-associated expression patterns within embryonic and differentiation-associated tissue compartments. The goat polyclonal format supports recognition of multiple GBX2-associated epitopes and may enhance target detection across denatured protein preparations and developmental tissue research applications.

GBX2 continues to serve as an important target in studies involving embryonic signaling pathways, developmental transcriptional regulation, tissue differentiation, and lineage specification biology. For broader analysis of hindbrain-associated developmental signaling and neurodevelopmental transcription factor biology, see our GBX2 Antibody / Hindbrain Development Regulator Antibody.

Application Notes

Optimal dilution of the GBX2 Antibody / Developmental Patterning Protein Antibody should be determined by the researcher.

Immunogen

Amino acids QGKDESKVEDDPK were used as the immunogen for this GBX2 antibody.

Storage

Aliquot and store the GBX2 antibody at -20oC.

Alternate Names

GBX2 antibody, Gastrulation brain homeobox 2 antibody, Developmental transcription factor antibody, Homeobox protein antibody, Embryonic patterning regulator antibody

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