

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects a synthetic peptide for Human BEND2 around amino acid 550 in Direct ELISA
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 1121524
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Synthetic Peptide Accession # Q8NDZ0
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

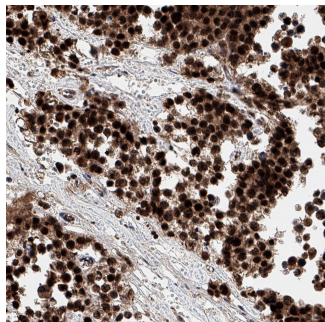
**APPLICATIONS**

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Immunohistochemistry</b>	0.25-25 µg/mL	Immersion fixed paraffin-embedded sections of human testis tumor

**DATA**

**Immunohistochemistry**



**Immersion fixed paraffin-embedded sections of testis tumor** BEND2 was detected in immersion fixed paraffin-embedded sections of testis tumor using Mouse Anti-Human BEND2 Monoclonal Antibody (Catalog # MAB11807) at 1 µg/ml overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # [VCTS021](#)). Tissue was stained using the HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # [HAF007](#)) and counterstained with hematoxylin (blue). Specific staining was localized to the nucleus. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute lyophilized material at 0.2 mg/ml in sterile PBS. For liquid material, refer to CoA for concentration.
<b>Shipping</b>	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

BEN domain-containing protein 2 (BEND2) is a member of the BEND protein family, which is characterized by the presence of BEN domains that play significant roles in chromatin organization and transcriptional regulation. BEND2 is predominantly expressed in the brain and testes, suggesting tissue-specific functions, and has been implicated in gene regulatory processes crucial for cellular identity and development. Dysregulation of BEND2 has been associated with neurodevelopmental disorders, with emerging evidence linking mutations in the BEND2 gene to intellectual disabilities and autism spectrum disorders. Furthermore, its role in chromatin remodeling underscores its importance in maintaining genomic stability and regulating gene expression. Due to these associations, BEND2 may represent a promising biomarker for specific neurological and developmental conditions, and a potential target for therapeutic interventions aimed at modulating chromatin structure and function.

**References:**

1. Ma L, Xie D, Luo M, Lin X, Nie H, Chen J, Gao C, Duo S, Han C. Identification and characterization of BEND2 as a key regulator of meiosis during mouse spermatogenesis. *Sci Adv.* 2022 May 27;8(21):eabn1606. doi: 10.1126/sciadv.abn1606. Epub 2022 May 25. PMID: 35613276; PMCID: PMC9132480.
2. Okuno H, Nakashima T, Arai Y, Hamá N, Shirakura T, Yamazaki A, Matsumura N, Kirishima M, Fudaba H, Goto H, Hanihara M, Yamasaki K, Yamada S, Washio K, Otani Y, Nagaishi M, Matsuda H, Ishida A, Yamasaki F, Yoshioka T, Yokoo H, Mikami Y, Tanaka S, Hirose T, Sasaki A, Saito R, Arakawa Y, Ishikawa E, Nakada M, Mukasa A, Gomi A, Shibata T, Hirato J, Yoshida A, Suzuki H, Nobusawa S. BEND2 Immunohistochemistry as a Useful Diagnostic Marker for Astroblastomas With BEND2 Fusion. *Am J Surg Pathol.* 2026 Mar 13. doi: 10.1097/PAS.0000000000002529. Epub ahead of print. PMID: 41821381.
3. Huang Y, Bucevic N, Coves C, Felipe-Medina N, Marcet-Ortega M, Nikou N, Madrid-Sandín C, López-Panadés M, Buza C, Ferrer Miralles N, Iborra A, Pujol A, Pendás AM, Roig I. The full-length BEND2 protein is dispensable for spermatogenesis but required for setting the ovarian reserve in mice. *Elife.* 2025 Aug 20;13:RP96052. doi: 10.7554/eLife.96052. PMID: 40833257; PMCID: PMC12367297.