

## CDX2 (EP25)

Format	Catalog No.	Pack size	Dilution
Concentrated	G03311 A, B, C	0.1, 0.5, 1.0 mL	1:100 - 200
Prediluted	G03311 AA, BB	6.0, 3.0 mL	Ready to use

### ANTIBODY SPECIFICATIONS

- **HOST SPECIES:** Rabbit
- **CLONE:** EP25
- **ISOTYPE:** IgG
- **CELLULAR LOCALIZATION:** Nuclear
- **IMMUNOGEN:** A synthetic peptide corresponding to residues near the C-terminus of human CDX-2 protein
- **MOLECULAR WEIGHT:** ~33-40 kDa
- **SPECIES REACTIVITY:** Human; other species not tested.
- **POSITIVE CONTROLS:** Adenocarcinoma of Colon, Normal Colon

### INTENDED USE

This antibody is intended **for research use only (RUO)** and is not approved for diagnostic or therapeutic applications. It is optimized for the detection of CDX2 protein in formalin-fixed, paraffin-embedded (FFPE) human tissues by immunohistochemistry (IHC).

### SUMMARY AND APPLICATION

Genebio produces the rabbit monoclonal antibody CDX2 for immunohistochemistry. The caudal-type homeobox gene CDX2 encodes a transcription factor specific to the gut that is expressed early in intestinal development and may have a role in controlling the differentiation and proliferation of intestinal epithelial cells. From the duodenum to the rectum, it is expressed in the nucleus of epithelial cells in the intestine.

### SCIENTIFIC BACKGROUND

The CDX2 protein has been shown to be expressed in intestinal metaplasia of the stomach and intestinal-type gastric cancer, as well as primary and metastatic colorectal carcinomas. It is not expressed in the normal mucosa of the stomach. Loss of differentiation in colorectal tumours has been linked to decreased expression of the CDX2 protein. When determining the gastrointestinal origin of metastatic adenocarcinomas and carcinoids, the CDX2 antibody has been helpful. According to studies, the CDX2 antibody is a better marker than CK20. Both ovarian mucinous carcinomas and upper gastrointestinal tract cancers have a high percentage of positive staining with this antibody.

### RECOMMENDED USAGE

- **IHC Protocol Highlights:**
  - Dilution: 1–2 µg/mL
  - Incubation: 30 minutes at room temperature

- o Antigen Retrieval: Heat in 10 mM Tris with 1 mM EDTA (pH 9.0) at 95°C for 45 minutes, followed by cooling
- **Specimen Type:** FFPE sections, preferably ~4 µm

**FORMULATION & STORAGE:**

- Buffer: 10 mM PBS, 0.05% BSA, 0.05% sodium azide
- Storage:
  - o Dilution: 1–2 µg/ML
  - o Without azide: –20 to –80°C
- Shelf Life: 24 months under proper conditions
- Hazard Classification: Non-hazardous; no MSDS required

**LIMITATIONS**

- Interpretation must be made by a qualified pathologist
- Tissue fixation and handling may affect staining quality
- Negative results do not always indicate absence of antigen—consider panel testing

**PRECAUTIONS**

- Contains 0.05% sodium azide – avoid ingestion and contact with skin or mucosa
- Wear gloves and avoid contact with eyes or mucosa
- Do not use reagents past expiration or if packaging appears compromised
- Do not pipette by mouth or reuse slides/containers without proper sterilization

**TECHNICAL SUPPORT**

For technical assistance, please contact GeneBio Solution's Technical Support at [www.genebiosolution.com](http://www.genebiosolution.com)