# **Anti-CDX2 Antibody [SY09-02]**

### ET1605-4



Product Type: Recombinant Rabbit monoclonal IgG, primary antibodies

Species reactivity: Human, Mouse, Rat

Applications: WB, IF-Cell, IF-Tissue, IHC-P, FC, CUT&Tag-seq

Molecular Wt: Predicted band size: 34 kDa

Clone number: SY09-02

**Description:** In common with the two other Cdx genes, CDX2 regulates several essential processes in the

development and function of the lower gastrointestinal tract (from the duodenum to the anus) in vertebrates. In vertebrate embryonic development, CDX2 becomes active in endodermal cells that are posterior to the developing stomach. These cells eventually form the intestinal epithelium. The activity of CDX2 at this stage is essential for the correct formation of the

intestine and the anus.CDX2 is also required for the development of the placenta.

**Immunogen:** Synthetic peptide within human CDX2 aa 20-60.

Positive control: Caco-2 cell lysate, LoVo cell lysate, AGS cell lysate, LOVO, AGS, human appendix tissue,

Human stomach cancer tissue, human colon cancer tissue, human colon tissue, mouse colon

tissue, rat colon tissue, Hela.

Subcellular location: Nucleus.

Database links: SwissProt: Q99626 Human | P43241 Mouse

Entrez Gene: 66019 Rat

**Recommended Dilutions:** 

WB 1:1,000-1:2,000
IF-Cell 1:50-1:200
IF-Tissue 1:200-1:2,000
IHC-P 1:500-20,000
FC 1:50-1:100

**Storage Buffer:** 1\*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

**Purity:** Protein A affinity purified.

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**Technical:** 0086-571-89986345

Service mail:support@huabio.cn



#### **Images**

**Fig1:** Western blot analysis of CDX2 on different lysates with Rabbit anti-CDX2 antibody (ET1605-4) at 1/1,000 dilution.

Lane 1: Caco-2 cell lysate Lane 2: LoVo cell lysate Lane 3: AGS cell lysate

Lysates/proteins at 15 µg/Lane.

Predicted band size: 34 kDa Observed band size: 34 kDa

Exposure time: 25 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

**Fig2:** Western blot analysis of CDX2 on different lysates with Rabbit anti-CDX2 antibody (ET1605-4) at 1/1,000 dilution.

Lane 1: MCF7-si NT cell lysate Lane 2: MCF7-si CDX2 cell lysate

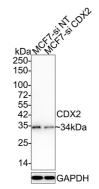
Lysates/proteins at 10 µg/Lane.

Predicted band size: 34 kDa Observed band size: 34 kDa

Exposure time: 3 minutes;

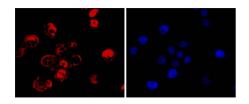
4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET1605-4) at 1/1,000 dilution was used in 5% NFDM/TBST at  $4^{\circ}$ C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.



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**Fig3:** ICC staining of CDX2 in LOVO cells (red). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with the primary antibody (ET1605-4, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).

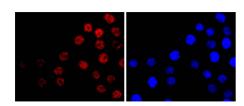
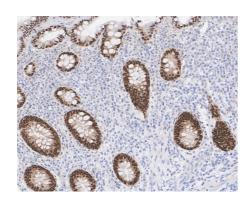
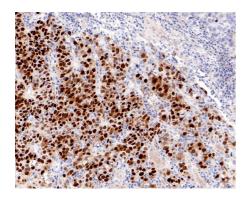


Fig4: ICC staining of CDX2 in AGS cells (red). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with the primary antibody (ET1605-4, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).



**Fig5:** Immunohistochemical analysis of paraffin-embedded human appendix tissue with Rabbit anti-CDX2 antibody (ET1605-4) at 1/5,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (ET1605-4) at 1/5,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



**Fig6:** Immunohistochemical analysis of paraffin-embedded Human stomach cancer tissue with Rabbit anti-CDX2 antibody (ET1605-4) at 1/500 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (ET1605-4) at 1/500 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

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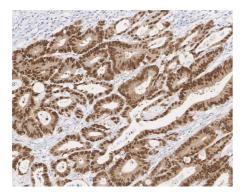
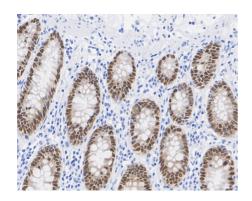


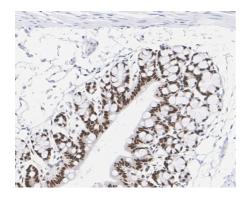
Fig7: Immunohistochemical analysis of paraffin-embedded human colon cancer tissue with Rabbit anti-CDX2 antibody (ET1605-4) at 1/5,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (ET1605-4) at 1/5,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



**Fig8:** Immunohistochemical analysis of paraffin-embedded human colon tissue with Rabbit anti-CDX2 antibody (ET1605-4) at 1/20,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (ET1605-4) at 1/20,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

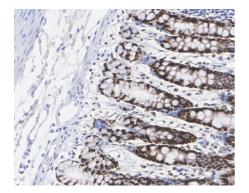


**Fig9:** Immunohistochemical analysis of paraffin-embedded mouse colon tissue with Rabbit anti-CDX2 antibody (ET1605-4) at 1/20,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (ET1605-4) at 1/20,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

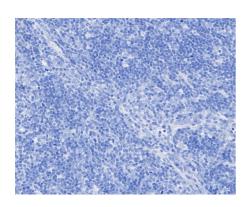
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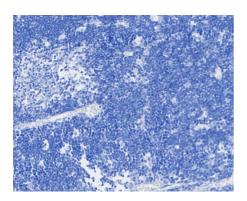
**Fig10:** Immunohistochemical analysis of paraffin-embedded rat colon tissue with Rabbit anti-CDX2 antibody (ET1605-4) at 1/20.000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (ET1605-4) at 1/20,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



**Fig11:** Immunohistochemical analysis of paraffin-embedded human thymus tissue (negative) with Rabbit anti-CDX2 antibody (ET1605-4) at 1/5,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH $_2$ O and PBS, and then probed with the primary antibody (ET1605-4) at 1/5,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



**Fig12:** Immunohistochemical analysis of paraffin-embedded rat thymus tissue (negative) with Rabbit anti-CDX2 antibody (ET1605-4) at 1/5,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH $_2$ O and PBS, and then probed with the primary antibody (ET1605-4) at 1/5,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

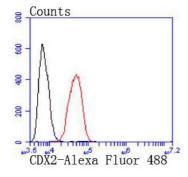


Fig13: Flow cytometric analysis of CDX2 was done on Hela cells. The cells were fixed, permeabilized and stained with the primary antibody (ET1605-4, 1/50) (red). After incubation of the primary antibody at room temperature for an hour, the cells were stained with a Alexa Fluor 488-conjugated Goat anti-Rabbit IgG Secondary antibody at 1/1000 dilution for 30 minutes.Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

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Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

#### **Background References**

- 1. Yang Y et al. Heightened potency of human pluripotent stem cell lines created by transient BMP4 exposure. Proc Natl Acad Sci U S A 112:E2337-46 (2015).
- 2. Ohinata Y & Tsukiyama T Establishment of trophoblast stem cells under defined culture conditions in mice. PLoS One 9:e107308 (2014).