

**Mouse Anti-HES1/ES1/c21orf33 [E5]: MC0981, MC0981RTU7**

**Intended Use:** For Research Use Only

**Description:** The Drosophila Hairy and enhancer of split genes encode basic helix-loop-helix (bHLH) transcriptional repressors that function in the Notch signaling pathway and control segmentation and neural development during embryogenesis. The mammalian homolog of Drosophila Hairy and enhancer of split are the HES gene family members HES1-6, which also encode bHLH transcriptional repressors that regulate myogenesis and neurogenesis. The HES family members form a complex with TLE, the mammalian homolog of groucho, and this interaction is mediated by the carboxy-terminal WRPW motif of the HES proteins. The HES/TLE complex functions by directly binding to DNA instead of interfering with activator proteins. Most HES family members, including HES1 and HES5, preferentially bind to the N box (CACNAG) as opposed to the E box (CANNTG). HES1 and HES2 are expressed in a variety of adult and embryonic tissues.

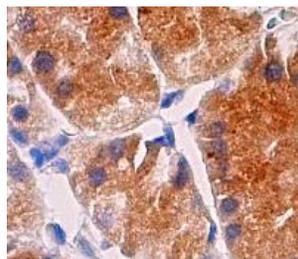
**Specifications:**

Clone: E5  
 Source: Mouse  
 Isotype: IgG2b/k  
 Reactivity: Human, mouse, rat  
 Localization: Mitochondrial  
 Formulation: Antibody in PBS pH7.4, containing BSA, < 0.1% gelatin, and < 0.09% sodium azide (NaN3).  
 Storage: Store at 2°- 8°C.  
 Applications: IHC, ELISA, ICC/IF, IP, WB  
 Package:

Description	Catalog No.	Size
HES1/ES1/c21orf33 Concentrated	MC0981	1 ml
HES1/ES1/c21orf33 Prediluted	MC0981RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Heart, liver  
 Concentrated Dilution: 50-250  
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual  
 \* Result should be confirmed by an established diagnostic procedure.



FFPE human stomach tissue stained with anti-HES1 using DAB

**References:**

1. Special AT-rich sequence-binding protein-1 participates in the maintenance of breast cancer stem cells through regulation of the Notch signaling pathway and expression of Snail1 and Twist1. Sun, Z. et al. Molecular medicine reports. 11: 3235-542, 2015.
2. The jagged-2/notch-1/hes-1 pathway is involved in intestinal epithelium regeneration after intestinal ischemia-reperfusion injury. Chen, G. et al. PloS one, 2013.

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Rev. A