

Code No. 18101

**Anti-Human
c-Kit (K963) Rabbit IgG Affinity Purify**Volume : 100 µg

Introduction : The proto-oncogene *c-kit* encodes a transmembrane tyrosine kinase receptor, and its ligand for c-Kit receptor has been identified as the stem cell factor (SCF). Recent experimental studies have shown that c-Kit plays a key role in the development of a component of the pacemaker system that is required for generation of autonomic gut motility. These studies further suggest that interaction of the c-Kit and SCF is essential for development of enteric nervous system. Recently, it is reported that the c-Kit may be an important marker for gastrointestinal stromal tumors (GISTs) which may originate from the interstitial cells of Cajal (ICCs).

Antigen : Synthetic peptide for the C-terminal of human c-Kit
(TASSSQPLLHDDV)

Purification : Purified with antigen peptide

Form : Lyophilized product from 1 % BSA in PBS containing 0.05 % NaN₃

How to use : 1.0 mL deionized water will be added to the product (the conc. comes up 100 µg /mL)

Stability : Lyophilized product, 5 years at 2 – 8 °C
: Solution, 2 years at –20 °C

Application : This antibody can be used for immunohistochemistry with formalin fixed paraffin embedded tissues. The optimal concentration is about 5 - 10 µg/mL, however, the concentration should be optimized by each laboratory.
: This antibody can be used for western blotting in concentration of 5 - 10 µg /mL.

Specificity : Human c-Kit (M.W.145 kDa) specific

Reference :
1. Hirota S. *et al.* Gain-of-function mutations of c-kit in human gastrointestinal stromal tumors. *Science*. 1998: 279 (5350), 577-580.
2. Komuro T. *et al.* Ultrastructural characterization of interstitial cells of Cajal. *Arch. Histol. Cytol.* 1999: 62 (4), 295-316
3. Yamataka A. Abnormal distribution of intestinal pacemaker (C-KIT-positive) cells in an infant with chronic idiopathic intestinal pseudoobstruction. *J. Pediatric Surgery*. 1998: 33 (6), 859-862
4. Yamataka A. *et al.* Intestinal Pacemaker C-KIT Cells and Synapses in Allied Hirschsprung's disorders. *J. Pediatric Surgery*. 1997: 32 (7), 1069-1074.
5. Yamataka A. *et al.* A Lack of Intestinal Pacemaker (c-kit) in Aganglionic Bowel of Patients With Hirschsprung's Disease. *J. Pediatric Surgery*. 1995: 30 (3), 441-444.
6. Yamataka A. *et al.* Localization of intestinal pacemaker cells and synapses in the muscle layers of a patient with colonic hypoganglionosis. *J. Pediatric Surgery*. 1996: 31 (4), 584-587.
7. Yamataka A. *et al.* Lack of intestinal pacemaker (C-KIT-positive) cells in infantile hypertrophic pyloric stenosis. *J. Pediatric Surgery*. 1996: 31(1), 96-99.
8. Kindblom L-G. *et al.* Gastrointestinal pacemaker cell tumor (GIPACT): gastrointestinal stromal tumors show phenotypic characteristics of the interstitial cells of Cajal. *Am. J. Pathol.* 1998: 152 (5): 1259-1269

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