

# **GEN1** Rabbit mAb

Catalog # AP75486

### **Product Information**

Application WB
Primary Accession Q17RS7

Reactivity Human, Mouse, Rat

**Host** Rabbit

**Clonality** Monoclonal Antibody

Calculated MW 102884

#### **Additional Information**

**Gene ID** 348654

Other Names GEN1

**Dilution** WB~~1/500-1/1000

Format Liquid

#### **Protein Information**

Name GEN1

**Function** Endonuclease which resolves Holliday junctions (HJs) by the introduction of

symmetrically related cuts across the junction point, to produce nicked duplex products in which the nicks can be readily ligated. Four-way DNA intermediates, also known as Holliday junctions, are formed during homologous recombination and DNA repair, and their resolution is necessary

for proper chromosome segregation (PubMed:19020614, PubMed:26682650). Cleaves HJs by a nick and counter- nick mechanism involving dual coordinated incisions that lead to the formation of ligatable nicked duplex products. Cleavage of the first strand is rate limiting, while second strand cleavage is rapid. Largely monomeric, dimerizes on the HJ and the first nick occurs upon dimerization at the junction (PubMed:26578604). Efficiently cleaves both single and double HJs contained within large recombination intermediates. Exhibits a weak sequence preference for incision between two G residues that

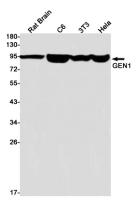
reside in a T-rich region of DNA (PubMed: 28049850). Also has endonuclease

activity on 5'-flap and replication fork (RF) DNA substrates

(PubMed: <u>26578604</u>).

Cellular Location Nucleus

## **Images**



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