

## **Product Name: GEN1 Rabbit Monoclonal Antibody**

Catalog #: AMRe85607

For research use only.

#### **Summary**

**Description** Recombinant rabbit monoclonal antibody

Host Rabbit
Application WB

Reactivity Human,Mouse,Rat
Conjugation Unconjugated
Modification Unmodified

**Isotype** IgG

Clonality Monoclonal
Form Liquid

Concentration

**Storage** Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.

**Shipping** Ice bags

**Buffer** Purified antibody in TBS with 0.05% sodium azide,0.05% protective protein and 50% glycerol.

**Purification** Affinity Purification

#### **Application**

**Dilution Ratio** WB 1:500-1:1000

Molecular Weight Calculated MW: 103 kDa; Observed MW: 103 kDa

## **Antigen Information**

**Gene Name** GEN1 **Alternative Names** Gen

 Gene ID
 348654.0

 SwissProt ID
 Q17RS7

**Immunogen** A synthetic peptide of human GEN1

## **Background**

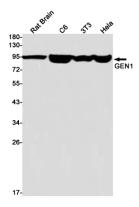
Endonuclease which resolves Holliday junctions (HJs) by the introduction of symmetrically related cuts across the junction point, to produce nicked duplex products in which the nicks can be readily ligated. Four-way DNA intermediates, also known as Holliday junctions, are formed during homologous recombination 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). Has also endonuclease activity on 5'-flap and replication fork (RF) DNA substrates (PubMed:26578604).

#### **Research Area**

# **Image Data**



Western blot analysis of GEN1 in rat Brain, C6, 3T3, Hela lysates using GEN1 antibody.