
Product Name: GEN1 Rabbit Monoclonal Antibody**Catalog #: AMRe02030**

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	0.5mg/ml. The concentration of this product may be batch-dependent.
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% protective protein
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
SwissProt ID	Q17RS7
Immunogen	A synthetic peptide of human GEN1

Background

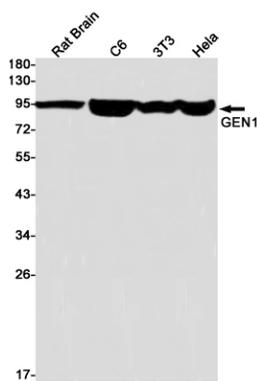
Endonuclease which resolves Holliday junctions (HJs) by the introduction of symmetrically related cuts across the junction point, to produce nicked duplex products in which the nicks can be readily ligated. Four-way DNA intermediates, also known as

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

Epigenetics and Nuclear Signaling

Image Data



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