

Product datasheet for **TA384295S**

GEN1 Rabbit Monoclonal Antibody [Clone ID: R09-1B8]

Product data:

Product Type:	Primary Antibodies
Clone Name:	R09-1B8
Applications:	WB
Recommended Dilution:	WB: 1/1000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	A synthetic peptide of human GEN1
Formulation:	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Concentration:	lot specific
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Stability:	1 year
Predicted Protein Size:	Calculated MW: 103 kDa; Observed MW: 103 kDa
Gene Name:	GEN1, Holliday junction 5' flap endonuclease
Database Link:	Entrez Gene 348654 Human Q17RS7



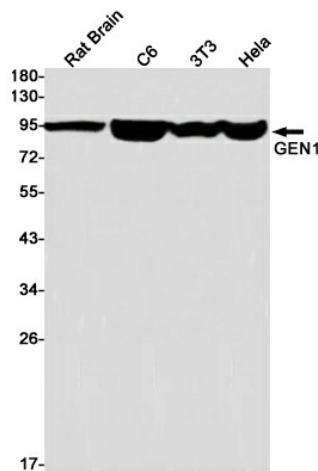
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Background:

Swiss-Prot Acc.Q17RS7.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).

Synonyms:

DKFZp781F0986; FLJ40869; Gen

Product images:

Western blot detection of GEN1 in Rat Brain,C6,3T3,HeLa cell lysates using GEN1 Rabbit mAb(1:1000 diluted).Predicted band size:103kDa.Observed band size:103kDa.