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# Product datasheet for TA384295M

## 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<br>Q17RS7 |

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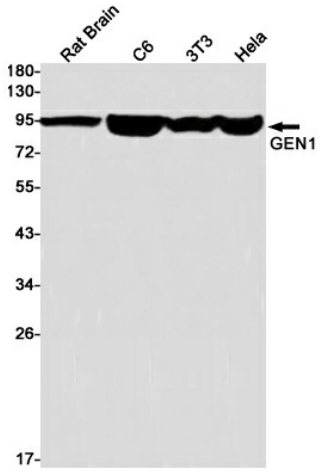
**Background:** Swiss-Prot Acc.Q17RS7.Endonuclease which resolves Holliday junctions (HJs) by the introduction of symmetrically related cuts across the junction point, to produce nicked duplex products in which the nicks can be readily ligated. Four-way DNA intermediates, also known as Holliday junctions, 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.