

KIAA1191 (G-4): sc-398723

BACKGROUND

KIAA1191 is a 305 amino acid protein that belongs to the UPF0498 family and exists as three alternatively spliced isoforms. The gene that encodes KIAA1191 consists of approximately 15,908 bases and maps to human chromosome 5q35.2. With 181 million base pairs, Chromosome 5 comprises nearly 6% of the human genome. Chromosome 5 is associated with Cockayne syndrome through the ERCC8 gene and familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome is also chromosome 5-associated and is caused by insertions or deletions within the TCOF1 gene. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

1. Edwards, S.J., et al. 1997. The mutational spectrum in Treacher Collins syndrome reveals a predominance of mutations that create a premature-termination codon. *Am. J. Hum. Genet.* 60: 515-524.
2. McDaniel, L.D., et al. 1997. Confirmation of homozygosity for a single nucleotide substitution mutation in a Cockayne syndrome patient using monoallelic mutation analysis in somatic cell hybrids. *Hum. Mutat.* 10: 317-321.
3. Crawford, M.J., et al. 1997. Human and murine PTX1/Ptx1 gene maps to the region for Treacher Collins syndrome. *Mamm. Genome* 8: 841-845.
4. Finch, R., et al. 2005. Familial adenomatous polyposis and mental retardation caused by a *de novo* chromosomal deletion at 5q15-q22: report of a case. *Dis. Colon Rectum* 48: 2148-2152.
5. Anindya, R., et al. 2007. Damage-induced ubiquitylation of human RNA polymerase II by the ubiquitin ligase Nedd4, but not Cockayne syndrome proteins or BRCA1. *Mol. Cell* 28: 386-397.
6. Vera-Carbonell, A., et al. 2009. Characterization of a *de novo* complex chromosomal rearrangement in a patient with Cri-du-chat and trisomy 5p syndromes. *Am. J. Med. Genet. A* 149A: 2513-2521.

CHROMOSOMAL LOCATION

Genetic locus: KIAA1191 (human) mapping to 5q35.2; 4833439L19Rik (mouse) mapping to 13 B1.

SOURCE

KIAA1191 (G-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 209-246 within an internal region of KIAA1191 of human origin.

PRODUCT

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-398723 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

KIAA1191 (G-4) is recommended for detection of KIAA1191 of human origin, 4833439L19Rik of mouse origin and the corresponding rat homolog by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for KIAA1191 siRNA (h): sc-91721, 4833439L19Rik siRNA (m): sc-108979, KIAA1191 shRNA Plasmid (h): sc-91721-SH, 4833439L19Rik shRNA Plasmid (m): sc-108979-SH, KIAA1191 shRNA (h) Lentiviral Particles: sc-91721-V and 4833439L19Rik shRNA (m) Lentiviral Particles: sc-108979-V.

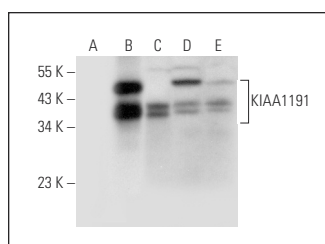
Molecular Weight of KIAA1191 isoforms: 33/31/11 kDa.

Positive Controls: KIAA1191 (h): 293T Lysate: sc-177430, HeLa whole cell lysate: sc-2200 or K-562 whole cell lysate: sc-2203.

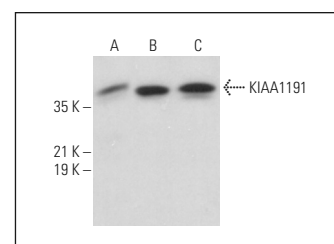
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



KIAA1191 (G-4): sc-398723. Western blot analysis of KIAA1191 expression in non-transfected 293T: sc-117752 (A), human KIAA1191 transfected 293T: sc-177430 (B), H4 (C), HeLa (D) and K-562 (E) whole cell lysates.



KIAA1191 (G-4): sc-398723. Western blot analysis of KIAA1191 expression in U-251-MG (A), BC3H1 (B) and F9 (C) whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.