SANTA CRUZ BIOTECHNOLOGY, INC.

FAAP20 siRNA (m): sc-108776

BACKGROUND

FAAP20 (Fanconi anemia core complex associated protein 20), also known as C1orf86 or FP7162, is a 180 amino acid nuclear protein that contains one UBZ-type zinc finger and is expressed as six isoforms produced by alternative splicing. Fanconi anemia is a genetic disease characterized by hematologic defects and cancer, with an inactive FA-BRCA pathway observed in patients. The Fanconi anemia core complex is required for the functional integrity of the FA-BRCA pathway which regulates DNA repair. FAAP20 interacts with FANCA to regulate stability of FANCA and recruits the FA complex to DNA interstrand crosslinks and mediates DNA repair by way of the UBZ (ubiquitin binding zinc finger) domain binding to K63-linked ubiquitin chains. FAAP20 also binds to the monoubiquitinated form of Rev1, and the FA-BRCA pathway controls Rev1-mediated translesion DNA synthesis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: 2610002J02Rik (mouse) mapping to 4 E2.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

PRODUCT

FAAP20 siRNA (m) is a target-specific 19-25 nt siRNA designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see FAAP20 shRNA Plasmid (m): sc-108776-SH and FAAP20 shRNA (m) Lentiviral Particles: sc-108776-V as alternate gene silencing products.

STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

FAAP20 siRNA (m) is recommended for the inhibition of FAAP20 expression in mouse cells.

SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 µM in 66 µl. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor FAAP20 gene expression knockdown using RT-PCR Primer: FAAP20 (m)-PR: sc-108776-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

RESEARCH USE

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