

Product datasheet for TR516090

Crybb2 Mouse shRNA Plasmid (Locus ID 12961)

Product data:

Product Type: shRNA Plasmids

Product Name: Crybb2 Mouse shRNA Plasmid (Locus ID 12961)

Locus ID: 12961

Synonyms: Aey; Cryb-; Cryb-2

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycir

Selection:

Puromycin

Format: Retroviral plasmids

Crybb2 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

12961). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: <u>BC085185, NM 007773, NM 007773.1, NM 007773.2, NM 007773.3, NM 007773.4</u>

UniProt ID: P62696

Summary: This gene is a member of the beta-crystallin family. Beta crystallins, along with alpha and

gamma crystallins, are the major proteins found in the eye lens. These proteins maintain the refractive index of the lens whilst also maintaining its transparency. Since lens central fiber cells lose their nuclei during development, crystallins are made and then retained throughout life, making them extremely stable proteins. Beta and gamma crystallins are considered be a superfamily and have a similar domain architecture, including four Greek Key motifs. Beta-crystallins form aggregates of different sizes and are able to self-associate to form dimers or to form heterodimers with other beta-crystallins. The protein encoded by this gene may have Ca2+-binding activity and could be associated with potential functions in the hippocampus and in sperm. Targeted knockout of this gene in mouse induces age-related cataract. A chain-terminating mutation in a similar gene in human was found to cause type 2 cerulean

cataracts. [provided by RefSeq, Feb 2015]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.



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Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).