I-SceI (yK-20): sc-23527

BACKGROUND
Group I intron-encoded endonucleases, like I-SceI, represent a new class of double strand cutting endonucleases which generate double strand breaks in site-specific sequences. Despite its small size (26 kDa), I-SceI initiates intron homing by recognizing and specifically cleaving a large intronless DNA sequence. I-SceI binds to its substrate in monomeric form. The I-SceI restriction site is absent from most prokaryotic and eukaryotic genomes. The mitochondrial I-SceI has an 18-bp recognition sequence and, therefore, has a very low probability of cutting DNA, even within large genomes. Double-strand breaks can be initiated by the I-SceI endonuclease at a predetermined location in the genome and the breaks can be repaired with a donor molecule homologous regions flanking the breaks.

REFERENCES

SOURCE
I-SceI (yK-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of I-SceI of Saccharomyces cerevisiae origin.

PRODUCT
Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-23527 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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

APPLICATIONS
I-SceI (yK-20) is recommended for detection of I-SceI of Saccharomyces cerevisiae origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Molecular Weight of I-SceI: 26 kDa.

RECOMMENDED SECONDARY REAGENTS
To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

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

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