

Sure-Race™ Discovery Panels

OVERVIEW

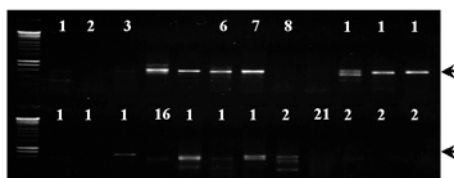
Traditional cDNA libraries frequently yield clones which are incomplete and where sequences representing the mRNA 5' ends are missing. RACE technology, a PCR*-based approach for rapid amplification of cDNA ends, has been particularly useful for completing the missing portions of cDNA clones and yielding full-length sequences of expressed gene regions.

Expanding the utility of the RACE technology, OriGene has developed a PCR-ready RACE panel that allows simultaneous 5' end analysis of transcripts from 24 individual human tissues or 24 mouse tissues. These Sure-RACE™ Discovery Panels are designed with the recognition that an increasing number of genes have been identified that 1) contain alternate RNA start-sites resulting from the use of tissue-specific or developmental stage-specific transcriptional promoters and 2) utilize alternate 5' exons and result in protein products with different N-terminal amino acid sequences.

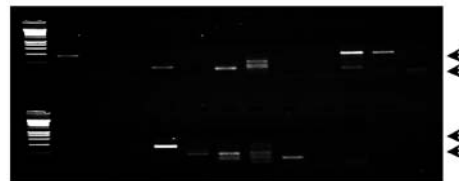
PRODUCT FORMAT AND APPLICATION

Sure-RACE Discovery Panels are designed for PCR-based analysis of double-stranded cDNA from 24 individual human or mouse tissues. Use of this product allows life science researchers to:

- **To complete the 5'-end sequences of long and rare transcripts with extensive secondary structures.** The ataxia telangiectasia (ATM) gene encodes a ubiquitous ~12.5 kb transcript with extensive conformations and heterogeneous 5' end.



- **To discover alternate RNA start-sites derived from different tissue-specific transcriptional promoters.** The intercellular adhesion molecule-1 (ICAM-1) gene uses different promoters to initiate transcription.



- **To identify differentially spliced transcripts that contain alternate 5' exons that are utilized in different tissues.** The fibroblast growth factor 1 (FGF-1) gene makes use of different 5' exons to regulate its expression.



Human Sure-RACE™ Panel Tissues

1. Brain	9. Muscle	17. Ovary
2. Heart	10. Stomach	18. Uterus
3. Kidney	11. Testis	19. Prostate
4. Spleen	12. Placenta	20. PBL(leukocyte)
5. Liver	13. Pituitary	21. Fetal Brain
6. Colon	14. Thyroid	22. Fetal Liver
7. Lung	15. Adrenal	23. Fat (adipose)
8. Small Intestine	16. Pancreas	24. Mammary

Mouse Sure-RACE™ Panel Tissues

1. Brain	9. Muscle	17. Embryo 8-9 day
2. Heart	10. Lung	18. Embryo 9.5 day
3. Kidney	11. Testis	19. Embryo 12.5 day
4. Spleen	12. Skin	20. Embryo 19 day
5. Thymus	13. Adrenal Gland	21. Breast/Virgin
6. Liver	14. Salivary Gland	22. Breast/Pregnant
7. Stomach	15. Uterus	23. Breast/Lactating
8. Small Intestine	16. Prostate	24. Breast/Involuting

Sure-Race™ Discovery Panels

KIT COMPONENTS

- Four identical, sealed 48-well plates containing two dilutions of 24 human or mouse RACE-ready tissue-specific cDNA's
- Set of adapter primers; ADP 1, outer primer for first-round PCR and ADP 2 for nested, second-round PCR
- Transferrin receptor primers 1 and 2 (10 µM each) positive control primers for first and second-round PCR
- Free sample of OriGene's DNA Quanti-Ladder™, a ready-to-use molecular marker for easy quantitation and size determination (50 µl)

ORDERING INFORMATION & PRICING

SURE-RACE DISCOVERY PANELS	CATALOG NUMBER
Human Sure-RACE™ Panels	HRAA-101
Mouse Sure-RACE™ Panels	MRAB-101

For pricing information call Customer Service at 1-888-267-4436 ext. 1.
To Order call 888-267-4436 (M-F, 9AM-5PM EST) or fax your order to 1-301-340-9254 (24 hours)
For Technical Support call 301-340-3188 ext. 2 or visit the OriGene website at www.origene.com

PRODUCT DELIVERY AND STORAGE

Panels are shipped at room temperature. Long-term storage at -20°C is recommended.



TrueClone™ Collection Blue-Ribbon™ Reagents Rapid-Screen™ Tools

6 Taft Court, Suite 300 Rockville, MD 20850 • Phone: 888-267-4436 Fax: 301-340-9254

www.origene.com