



ImmunoCruz™ Membrane Receptor-1 MicroArray: sc-200026

BACKGROUND

Antibody microarrays employ multiplex technology to both streamline and accelerate the simultaneous establishment of protein expression profiles in biological samples. Using a collection of antibodies that are fixed on a solid surface, antibody microarrays allow for the rapid and highly sensitive detection of target proteins in cell lysates, sera, or tissue extracts, a process that is visualized using Cy3 (Cyanine 3) and Cy5 (Cyanine 5) water-soluble fluorescent dyes. Santa Cruz Biotechnology offers several unique antibody Membrane Receptor MicroArrays, each targeting a host of different membrane receptor proteins. The antibodies featured in the ImmunoCruz™ Membrane Receptor-1 MicroArray allow for the concurrent and expedited detection of multiple membrane receptor proteins in a given sample. Additionally, Santa Cruz Biotechnology offers a variety of Phospho MicroArrays which contain antibodies designed to detect specific phosphorylation sites on biologically related proteins.

REFERENCES

- Ernst, L.A., Gupta, R.K., Mujumdar, R.B. and Waggoner, A.S. 1989. Cyanine dye labeling reagents for sulfhydryl groups. *Cytometry* 10: 3-10.
- Ekins, R.P. 1998. Ligand assays: from electrophoresis to miniaturized microarrays. *Clin. Chem.* 44: 2015-2030.
- Wingren, C. and Borrebaeck, C.A. 2004. High-throughput proteomics using antibody microarrays. *Expert Rev. Proteomics* 1: 355-364.
- Borrebaeck, C.A. and Wingren, C. 2007. High-throughput proteomics using antibody microarrays: an update. *Expert Rev. Mol. Diagn.* 7: 673-686.
- Chaga, G.S. 2008. Antibody arrays for determination of relative protein abundances. *Methods Mol. Biol.* 441: 129-151.
- Wingren, C. and Borrebaeck, C.A. 2009. Antibody-based microarrays. *Methods Mol. Biol.* 509: 57-84.

PRODUCT

ImmunoCruz™ Membrane Receptor-1 MicroArray is supplied as six identical slides, each containing one antibody microarray printed in a 8 x 12 configuration on coated slides. Each ImmunoCruz™ Membrane Receptor-1 MicroArray slide features 39 unique protein targets, represented by 88 individual antibodies printed in triplicate. Each slide also contains the following controls: a BSA negative control, Cy3 and Cy5 conjugated BSA positive controls, and a polyclonal anti-Cy3/Cy5 antibody. Select buffers, reagents and equipment necessary to perform sample analysis are also included.

The antibodies in the ImmunoCruz™ Membrane Receptor-1 MicroArray target a variety of transcription regulator proteins. A complete list of antibodies and an array map for data analysis are also provided. Each slide is suitable for use with either a Cy3 labeled sample or a Cy5 labeled sample.

STORAGE

Store all content at 4° C, ****DO NOT FREEZE****. Stable for 6 months from the date of shipment.

RESEARCH USE

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

APPLICATIONS

The ImmunoCruz™ Membrane Receptor-1 MicroArray is recommended for use with mouse, rat and human samples. Each of the 88 individual antibodies (listed on the back of this datasheet) is available for more in-depth sample analysis.

ImmunoCruz™ MicroArrays are compatible with most commercially available fluorescent detection microarray scanners that are equipped with an overhead light source and are capable of reading standard microscope slides. Also provided is an array list for slide analysis software.

SCANNING SERVICE

CruzScan™ Scanning Service: sc-200215 is an optional scanning service provided by Santa Cruz Biotechnology, free of charge, for use with purchased ImmunoCruz™ MicroArray slides. CruzScan™ provides results for six slides.

Sample analysis should be completed as close to the time of shipping as possible. Visit our website at www.scbt.com or contact Technical Service for more information.

SUPPORT REAGENTS

The following buffers, reagents and incubation trays are included in the ImmunoCruz™ Membrane Receptor-1 MicroArray:

Extraction/Labeling Buffer
Labeling Termination Reagent
10x Desalting Buffer
Array Incubation Buffer
5x Wash Buffer 1
5x Wash Buffer 2
4-well Incubation Trays

The following buffers, reagents and equipment, which are not included, are recommended for use with the ImmunoCruz™ Membrane Receptor-1 MicroArray:

Protease Inhibitor Cocktail: sc-29130
Phosphatase Inhibitor Cocktail B: sc-45045
Benzonase® Nuclease: sc-202391
BCA Protein Assay Kit: sc-202389
PBS, 10x, liquid: sc-24946
Microcentrifuge tubes: sc-200272
UltraCruz™ Micro G-25 Spin Columns: sc-202390
Cy3 Monofunctional Reactive dye
Cy5 Monofunctional Reactive dye
1 x 20 cm Kontes columns
Sephadex™ G-25
Microcentrifuge

Laser Scanner with 532 nm and 635 nm laser sources

Benzonase® is a registered trademark of Merck KGaA, Darmstadt, Germany.

Cy and Sephadex are trademarks of GE Healthcare Bio-Sciences AB.

PROTOCOLS

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

IMMUNOCRUZ™ MEMBRANE RECEPTOR-1 MICROARRAY: sc-200026 MICROARRAY MAP

NOTE: Antibodies are printed on each slide in the 8x12 configuration below. Each antibody is spotted in triplicate vertically. Bar code should be positioned across the bottom of the slide to read in proper orientation.

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|----------|----|----------|----|----------|----|----------|----|-----------|----|-----------|----|-----------|----|-----------|----|----------|----|----------|----|----------|----|--------------|
| 1 | Cy3-BSA | 9 | Cy5-BSA | 17 | sc-46903 | 25 | sc-03-G | 33 | sc-10746 | 41 | sc-926 | 49 | sc-5536 | 57 | sc-13121 | 65 | sc-7798 | 73 | sc-162 | 81 | sc-30225 | 89 | sc-50327 |
| 2 | sc-28995 | 10 | sc-122 | 18 | sc-67160 | 26 | sc-101 | 34 | sc-919 | 42 | sc-9319 | 50 | sc-130753 | 58 | sc-124 | 66 | sc-13935 | 74 | sc-8057 | 82 | sc-11633 | 90 | sc-7816 |
| 3 | sc-7500 | 11 | sc-6930 | 19 | sc-532 | 27 | sc-120 | 35 | sc-920 | 43 | sc-1763 | 51 | sc-285 | 59 | sc-136988 | 67 | sc-49952 | 75 | sc-6009 | 83 | sc-28348 | 91 | sc-57489 |
| 4 | sc-13937 | 12 | sc-14941 | 20 | sc-8988 | 28 | sc-28978 | 36 | sc-921 | 44 | sc-28980 | 52 | sc-415 | 60 | sc-121 | 68 | sc-67221 | 76 | sc-6010 | 84 | BSA | 92 | anti-Cy3/Cy5 |
| 5 | Cy3-BSA | 13 | Cy5-BSA | 21 | sc-21790 | 29 | sc-31265 | 37 | sc-922 | 45 | sc-130752 | 53 | sc-7390 | 61 | sc-276 | 69 | sc-25828 | 77 | sc-08 | 85 | sc-22009 | 93 | sc-9793 |
| 6 | sc-32261 | 14 | sc-15043 | 22 | sc-7555 | 30 | sc-925 | 38 | sc-135897 | 46 | sc-28981 | 54 | sc-283 | 62 | sc-7945 | 70 | sc-26341 | 78 | sc-284 | 86 | sc-50328 | 94 | sc-10815 |
| 7 | sc-7507 | 15 | sc-18007 | 23 | sc-8989 | 31 | sc-20738 | 39 | sc-927 | 47 | sc-100299 | 55 | sc-8050 | 63 | sc-7429 | 71 | sc-10 | 79 | sc-7301 | 87 | sc-26131 | 95 | sc-13522 |
| 8 | sc-28996 | 16 | sc-30028 | 24 | sc-03 | 32 | sc-924 | 40 | sc-1014 | 48 | sc-130064 | 56 | sc-123 | 64 | sc-9169 | 73 | sc-161 | 80 | sc-20992 | 88 | BSA | 96 | anti-Cy3/Cy5 |

IMMUNOCRUZ™ MEMBRANE RECEPTOR-1 MICROARRAY ANTIBODY LIST

| POSITION NUMBER | CATALOG NUMBER | NAME | TYPE OF ANTIBODY | SPECIES REACTIVITY | POSITION NUMBER | CATALOG NUMBER | NAME | TYPE OF ANTIBODY | SPECIES REACTIVITY |
|-----------------|----------------|-----------------------------|------------------|--------------------|-----------------|----------------|----------------------------|------------------|--------------------|
| 1 | Cy3-BSA | Cy3-conjugated BSA | control | N/A | 49 | sc-5536 | EphB4 (H-200) | pAb | m, r, h |
| 2 | sc-28995 | Adenosine A1-R (H-40) | pAb | m, r, h | 50 | sc-130753 | EphB4 (U-200) | pAb | human |
| 3 | sc-7500 | Adenosine A1-R (C-19) | pAb | m, r, h | 51 | sc-285 | ErbB-3 (C-17) | pAb | m, r, h |
| 4 | sc-13937 | Adenosine A2A-R (H-82) | pAb | m, r, h | 52 | sc-415 | ErbB-3 (RTJ.2) | mAb | human |
| 5 | Cy3-BSA | Cy3-conjugated BSA | control | N/A | 53 | sc-7390 | ErbB-3 (G-4) | mAb | m, r, h |
| 6 | sc-32261 | Adenosine A2A-R (7F6-G5-A2) | mAb | m, r, h | 54 | sc-283 | ErbB-4 (C-18) | pAb | m, r, h |
| 7 | sc-7507 | Adenosine A2B-R (R-20) | pAb | m, r, h | 55 | sc-8050 | ErbB-4 (C-7) | mAb | m, r, h |
| 8 | sc-28996 | Adenosine A2B-R (H-40) | pAb | m, r, h | 56 | sc-123 | FGFR-3 (C-15) | pAb | m, r, h |
| 9 | Cy5-BSA | Cy5-conjugated BSA | control | N/A | 57 | sc-13121 | FGFR-3 (B-9) | mAb | human |
| 10 | sc-122 | Bek (C-17) | pAb | m, r, h | 58 | sc-124 | FGFR-4 (C-16) | pAb | human |
| 11 | sc-6930 | Bek (C-8) | mAb | m, r, h | 59 | sc-136988 | FGFR-4 (A-10) | mAb | m, r, h |
| 12 | sc-14941 | bradykinin (K-15) | pAb | m, r, h | 60 | sc-121 | Flg (C-15) | pAb | m, r, h |
| 13 | Cy5-BSA | Cy5-conjugated BSA | control | N/A | 61 | sc-276 | Flg (VB56) | mAb | human |
| 14 | sc-15043 | bradykinin B1 R (V-17) | pAb | human | 62 | sc-7945 | Flg (H-76) | pAb | m, r, h |
| 15 | sc-18007 | CRLR (V-20) | pAb | m, r, h | 63 | sc-7429 | frizzled (C-17) | pAb | m, r, h |
| 16 | sc-30028 | CRLR (H-42) | pAb | m, r, h | 64 | sc-9169 | frizzled (H-300) | pAb | m, r, h |
| 17 | sc-46903 | DCIR (N-19) | pAb | human | 65 | sc-7798 | FSHR (N-20) | pAb | m, r, h |
| 18 | sc-67160 | DCIR (H-47) | pAb | human | 66 | sc-13935 | FSHR (H-190) | pAb | m, r, h |
| 19 | sc-532 | DDR1 (C-20) | pAb | m, r, h | 67 | sc-49952 | GPA2 (C-16) | pAb | m, r, h |
| 20 | sc-8988 | DDR1 (H-126) | pAb | m, r, h | 68 | sc-67221 | GPA2 (FL-129) | pAb | m, r, h |
| 21 | sc-21790 | DDR1 (48B3) | mAb | human | 69 | sc-25828 | LHR (H-50) | pAb | m, r, h |
| 22 | sc-7555 | DDR2 (N-20) | pAb | m, r, h | 70 | sc-26341 | LHR (K-15) | pAb | h > m, r |
| 23 | sc-8989 | DDR2 (H-108) | pAb | m, r, h | 71 | sc-10 | Met (C-12) | pAb | human |
| 24 | sc-03 | EGFR (1005) | pAb | m, r, h | 72 | sc-161 | Met (C-28) | pAb | h > m, r |
| 25 | sc-03-G | EGFR (1005)-G | pAb | m, r, h | 73 | sc-162 | Met (SP260) | pAb | m, r > h |
| 26 | sc-101 | EGFR (R-1) | mAb | human | 74 | sc-8057 | Met (B-2) | mAb | m, r |
| 27 | sc-120 | EGFR (528) | mAb | human | 75 | sc-6009 | MuSK (C-19) | pAb | m, r, h |
| 28 | sc-28978 | EPCR (FL-238) | pAb | m, r, h | 76 | sc-6010 | MuSK (N-19) | pAb | m, r, h |
| 29 | sc-31265 | EPCR (K-19) | pAb | h > m, r | 77 | sc-08 | Neu (9G6) | mAb | human |
| 30 | sc-925 | EphA1 (G-18) | pAb | m, r, h | 78 | sc-284 | Neu (C-18) | pAb | m, r, h |
| 31 | sc-20738 | EphA1 (H-120) | pAb | m, r, h | 79 | sc-7301 | Neu (F-11) | mAb | m, r, h |
| 32 | sc-924 | EphA2 (C-20) | pAb | m, r, h | 80 | sc-20992 | PRL-R (H-300) | pAb | h > m, r |
| 33 | sc-10746 | EphA2 (H-77) | pAb | m, r, h | 81 | sc-30225 | PRL-R (M-170) | pAb | m, r > h |
| 34 | sc-919 | EphA3 (C-19) | pAb | m, r, h | 82 | sc-11633 | PSR (L-20) | pAb | m, r, h |
| 35 | sc-920 | EphA3 (L-18) | pAb | m, r, h | 83 | sc-28348 | PSR (H-7) | mAb | human |
| 36 | sc-921 | EphA4 (S-20) | pAb | m, r, h | 84 | BSA | BSA | control | N/A |
| 37 | sc-922 | EphA4 (A-20) | pAb | m, r, h | 85 | sc-22009 | Relaxin Receptor 1 (T-20) | pAb | human |
| 38 | sc-135897 | EphA4 (35) | mAb | m, r, h | 86 | sc-50328 | Relaxin Receptor 1 (H-160) | pAb | m, r, h |
| 39 | sc-927 | EphA5 (C-16) | pAb | m, r, h | 87 | sc-26131 | Relaxin Receptor 2 (C-18) | pAb | human |
| 40 | sc-1014 | EphA5 (L-15) | pAb | m, r, h | 88 | BSA | BSA | control | N/A |
| 41 | sc-926 | EphB1 (O-20) | pAb | m, r, h | 89 | sc-50327 | Relaxin Receptor 2 (H-150) | pAb | m, r, h |
| 42 | sc-9319 | EphB1 (M-19) | pAb | m, r, h | 90 | sc-7816 | TSHR (N-19) | pAb | m, r, h |
| 43 | sc-1763 | EphB2 (C-20) | pAb | m, r, h | 91 | sc-57489 | TSHR (A10) | mAb | human |
| 44 | sc-28980 | EphB2 (H-80) | pAb | m, r, h | 92 | anti-Cy3/Cy5 | anti-Cy3/Cy5 antibody | control | N/A |
| 45 | sc-130752 | EphB2 (48CT12.6.4) | mAb | human | 93 | sc-9793 | uPAR (N-19) | pAb | human |
| 46 | sc-28981 | EphB3 (H-85) | pAb | m, r, h | 94 | sc-10815 | uPAR (FL-290) | pAb | m, r, h |
| 47 | sc-100299 | EphB3 (7E5) | mAb | m, h | 95 | sc-13522 | uPAR (10G7) | mAb | human |
| 48 | sc-130064 | EphB3 (4A122D1) | mAb | human | 96 | anti-Cy3/Cy5 | anti-Cy3/Cy5 antibody | control | N/A |