

Applications - Kinex™ Antibody Microarray

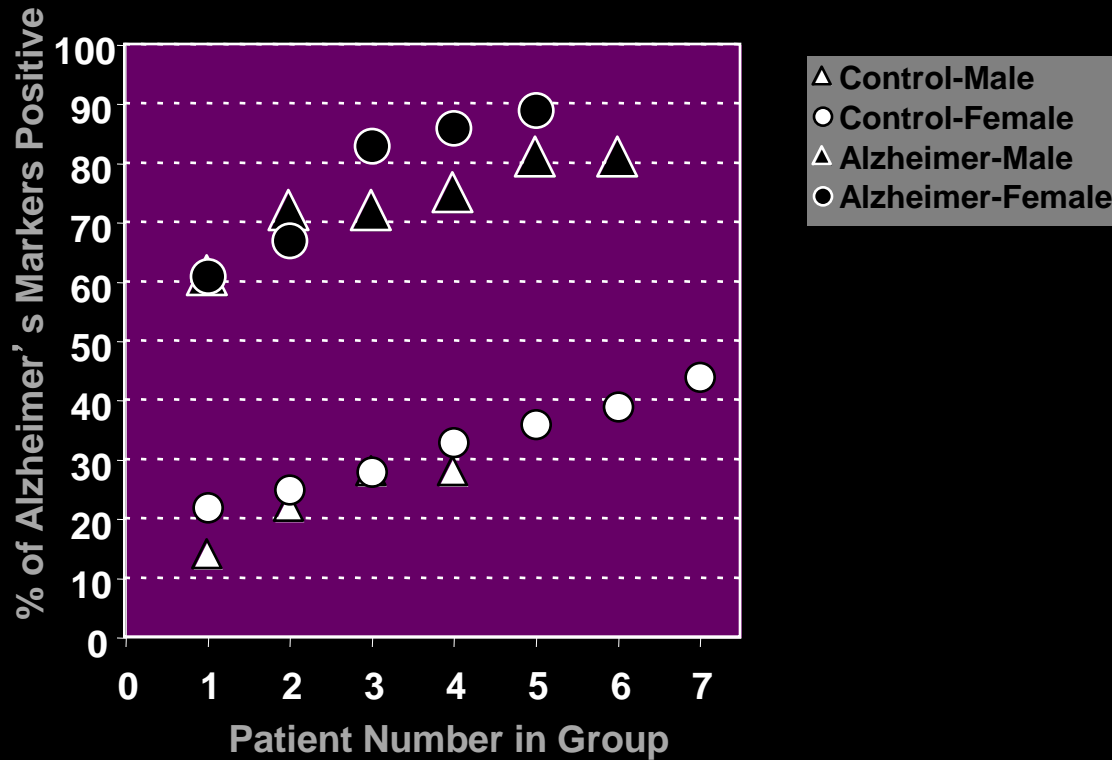
Alzheimer Disease Biomarker Discovery

- **Model system:** Lysates from peripheral blood lymphocytes from serum of 10 Alzheimer and 11 control patients
- **Proteomics analysis:** Kinex™ KAM-1.1 antibody microarray
- **Key results:** 37/622 (6%) antibodies revealed statistically significant changes (p values < 0.05 by Student T test) in the Alzheimer's Disease group greater than 17%; 6/622 (1%) antibodies revealed changes greater than 50%



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Alzheimer Disease Biomarker Discovery



Markers	Control Mean	Control S.Dev.	Alzh. Mean	Alzh. S.Dev.	%CFC
Alzh + Incr.	3.0	± 1.0	6.0	± 2.0	140
Alzh + Decr.	10.0	± 1.7	21.1	± 2.5	165
Total Alzh +	13.0	± 1.0	27.1	± 3.4	160
Total Alzh + %	36.1	± 2.8	75.3	± 9.6	160



KINEX™ Applications - Kinex™ Antibody Microarray

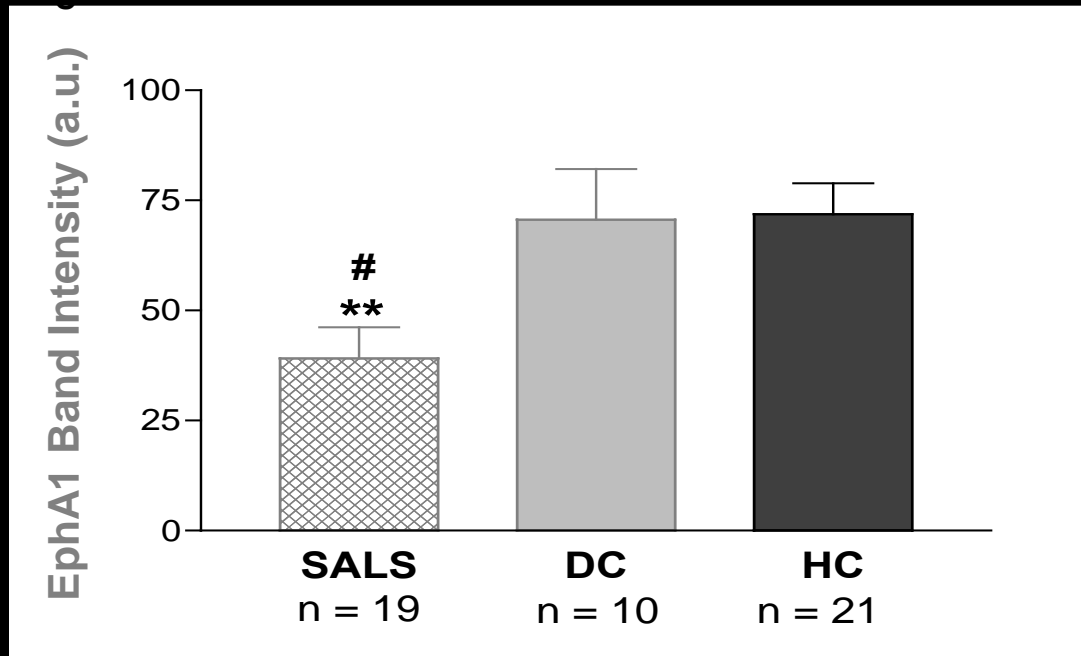
ALS Disease Biomarker Discovery

- **Model system:** Cerebral spinal fluid from serum of 19 sporadic amyotrophic lateral sclerosis patients, 21 healthy controls and 10 neurological disease controls
- **Proteomics analysis:** Kinex™ KAM-1.2 antibody microarray; Kinetworks™ custom multi-immunoblotting
- **Key results:** One of the key changes by antibody microarray analysis was an 81% decline with EphA1 antibodies seen in the ALS Disease group. A 40% drop in EphA1 levels was confirmed by immunoblotting. Test yielded 72% accuracy, 79% sensitivity, and 68% specificity.



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ALS Disease Biomarker Discovery



DC CSF (# $p < 0.05$) and HC CSF (** $p < 0.01$)

