



Q-Plex™ Case Studies

A selection of projects showcasing Quansys' rapid and efficient array development services

Pre-Clinical Array

A biopharmaceutical company wanted to multiplex novel proteins that are indicators of target organ toxicity. Researchers had previously tested these proteins individual ELISAs or on other multiplex platforms. After a lack of success in other platforms, they decided that the Quansys Biosciences chemiluminescent technology—the Q-Plex™ Array—would be the preferred platform. Chemiluminescent ELISAs have been shown to be more sensitive than traditional colorimetric ELISAs, and there are no known endogenous luminescent chemicals as in fluorescent arrays; using Q-Plex™ was a logical choice. Using Q-Plex™ technology, the company rapidly screened their library of antibodies for cross reactivity and matched pair determination.




CRO-Cytokine Array

A contract research organization (CRO) in Texas was asked by its sponsor to evaluate cytokine responses for multiple cytokines. This request was made in the final two weeks of the study, and multiplex ELISA was the only option that allowed for completion of the testing on time. After consulting other suppliers and service providers who were not able to help in a timely manner, the CRO contacted Quansys Biosciences. Quansys was able to get an imaging system and testing kits to the CRO the following day. With a minimal amount of training from Quansys' tech support personnel, the CRO was able to perform the assays and, most importantly, analyze the large amount of data included in their final report to the sponsor.

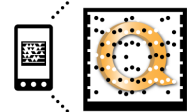
Pre-Clinical Pharma Array

A virtual pharmaceutical company approached Quansys Biosciences to devise assays that would help establish proof of concept that the pharmaceutical company required. This required Quansys to develop ELISAs that had not previously been developed anywhere else. Quansys was able to develop the required ELISAs in a multiplex platform covering multiple species and test the pharmaceutical company's *in vitro* and *in vivo* samples in-house using Quansys' sample testing services.

Advantages of Q-Plex™ Array Technology

- **Save Time**
 Simultaneously run up to 16 different assays in the same amount of time as a traditional ELISA.
- **Save Sample**
 Use 5µl to 50µl of sample to generate greater amounts of data compared to traditional ELISA testing.
- **Save Money**
 No need to purchase multiple ELISA kits to generate the same amount of data.
- Up to 16 markers from less than 50µl of sample in 2.5 hours.
- High sensitivity and low background
- Compatible with multiple sample types.
- Low cost compared to competing multiplex technologies.
- Validated to ensure no cross reactivity among markers within an array.
- Manufactured in an ISO 9001 registered facility.

Scan here to build your array



Get the free mobile app: <http://gettag.mobi>

POWERED By
Q-Plex
Technology

List of 2010 Publications Utilizing Q-Plex™ Technology

Addadi, Y., N. Moskovits, et al. (2010). "p53 Status in Stromal Fibroblasts Modulates Tumor Growth in an SDF1-Dependent Manner." *Cancer Res* **70**(23): 9650-8.

Broderick, G., J. Fuite, et al. (2010). "A formal analysis of cytokine networks in chronic fatigue syndrome." *Brain Behav Immun* **24**(7): 1209-17.

Escudero-Lourdes, C., M.K. Medeiros, et al. (2010). "Low level exposure to monomethyl arsonous acid-induced the over-production of inflammation-related cytokines and the activation of cell signals associated with tumor progression in a urothelial cell model." *Toxicology and Applied Pharmacology* **10**: 1016.

Falcone, T., V. Fazio, et al. (2010). "Serum S100B: a potential biomarker for suicidality in adolescents?" *PLoS One* **5**(6): e11089.

Fu, Z., W. Zhen, et al. (2010). "Epigallocatechin gallate delays the onset of type 1 diabetes in spontaneous non-obese diabetic mice." *Br J Nutr*: 1-8.

Han, S., Y. Wang, et al. (2010). "Ex vivo development, expansion and in vivo analysis of a novel lineage of dendritic cells from hematopoietic stem cells." *J Immune Based Ther Vaccines* **8**(1): 8.

Kennedy, D. J., S. Kuchibhotla, et al. (2010). "A CD36-dependent pathway enhances macrophage and adipose tissue inflammation and impairs insulin signalling." *Cardiovasc Res*.

Makley, A. T., M. D. Goodman, et al. "Resuscitation with fresh whole blood ameliorates the inflammatory response after hemorrhagic shock." *J Trauma* **68**(2): 305-11

Moheno, P., J. Morrey, et al. "Effect of dipterinyl calcium pentahydrate on hepatitis B virus replication in transgenic mice." *J Transl Med* **8**: 32

Ohayon, A., J. Golenser, et al. (2010). "Protein kinase C theta deficiency increases resistance of C57BL/6J mice to Plasmodium berghei infection-induced cerebral malaria." *Infect Immun* **78**(10): 4195-205.

Pahwa, R., S. Jaggaiahgari, et al. (2010). "Isolation and expansion of human natural T regulatory cells for cellular therapy." *J Immunol Methods* **363**(1): 67-79

Prabhala, R. H., D. Pelluru, et al. (2010). "Elevated IL-17 produced by TH17 cells promotes myeloma cell growth and inhibits immune function in multiple myeloma." *Blood* **115**(26): 5385-92

Schwartzman, M. L., P. Iserovich, et al. (2010). "Profile of lipid and protein autacoids in diabetic vitreous correlates with the progression of diabetic retinopathy." *Diabetes* **59**(7): 1780-8

Pastorelli, L., R. Garg, et al. (2010). "Epithelial-derived IL-33 and its receptor ST2 are dysregulated in ulcerative colitis and in experimental Th1/Th2 driven enteritis." *Proc Natl Acad Sci USA* **107**: (17)

Trune, D. R., B. E. Larrain, et al. "Simultaneous measurement of multiple ear proteins with multiplex ELISA assays." *Hear Res*.

Verseijden, F., S. Sluijs, et al. (2010) "Adult human bone marrow- and adipose tissue-derived stromal cells support the formation of prevascular-like structures from endothelial cells in vitro." *Tissue Engineering Part A* **16**(1): 101-114.

Waisberg, M., T. Tarasenko, et al. (2010). "Genetic susceptibility to systemic lupus erythematosus protects against cerebral malaria in mice." *Proc Natl Acad Sci U S A* **108**(3): 1122-7.

Quansys Biosciences develops cutting-edge multiplexing technologies and processes to improve the accuracy, simplify the process, and reduce the time and expense of ELISA testing.



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