

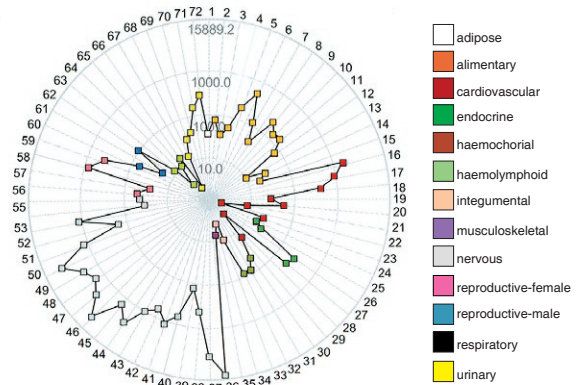
Gene Expression and Cellular Localization

To support target validation, Asterand offers three service-based approaches to measure human gene (mRNA) expression in non-diseased and diseased tissues.

XpressWay™ Profiles

Identify which human tissues express your targets to confirm therapeutic approach, exploit opportunities to switch indication and understand the potential for side effect liabilities.

- Quantitative gene expression data (qRT-PCR) measured in 72 different non-diseased tissues.
- Over 2300 gene profiles already available.
- XpressWay™ Profile Reports present visual expression profiles and data for your gene of interest in human tissues.
- Data are available on a gene-by-gene or tissue-by-tissue basis.



XpressWay™-generated stellar plot of GPR22 expression across 72 human tissue types (mRNA copies per 100ng of total RNA). These data show GPR22 is predominantly expressed in CNS and cardiovascular tissues.

Please visit the Target Validation pages of our website (www.asterand.com) for further information on our XpressWay™ Profiles.

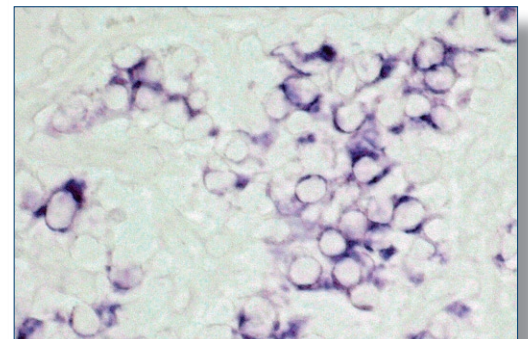
CustomMapping™

Explore differential expression of your targets in disease.

- Quantitative gene expression data measured in non-diseased and diseased human tissues.
- Standard RNA sets available based on existing cohorts of tissues relevant to a range of therapeutic areas.
- Custom RNA collections can be prepared to suit your specific gene expression profiling requirements.

In situ hybridization (ISH)

Asterand has a strong track record in delivering high quality ISH services to major pharmaceutical and biotech companies, providing quality data to enable the understanding of the distribution of gene expression at the cellular level. Custom, frozen tissue microarrays or cohorts of single frozen tissue sections of diseased and non-diseased tissues can be prepared and used for gene localisation by ISH.



Insulin mRNA expression in human islet β cells, generated using a DIG labelled riboprobe

EXPERTS IN HUMAN
TISSUE RESEARCH

EXTENSIVE HUMAN
TISSUE NETWORK

ADVANCE PROMISING
COMPOUNDS FASTER

INFORMED
DECISION MAKING

CONFIDENCE FOR
CLINICAL SUCCESS