Module 3: Genes and Sequences

iii. How can I find cDNA clones for my gene?

Aims

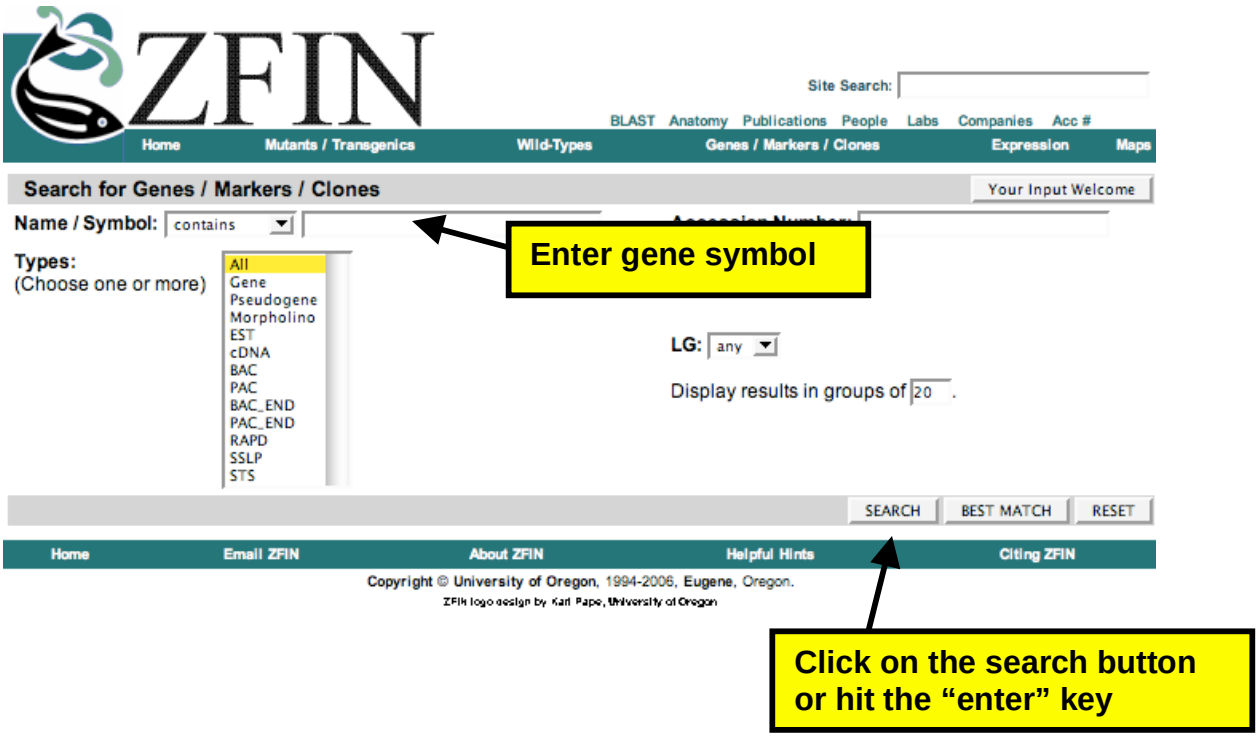
- Describe curation of clones and probes at ZFIN
- Suggest starting points for finding cDNA clones and probes
- Describe how to find a source for the reagent.

Introduction

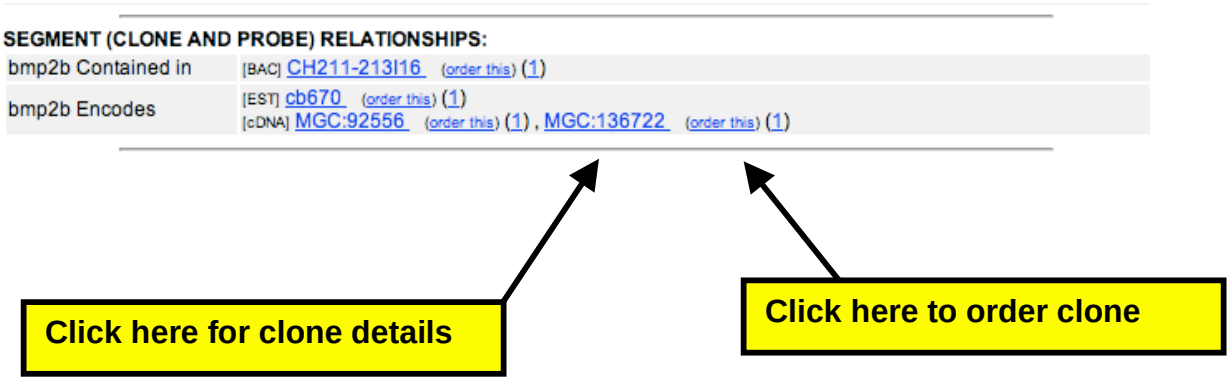
ZFIN incorporates information about full length cDNA clones from the Zebrafish Gene Collection (ZGC, http://zgc.nci.nih.gov/) , cDNAs used in large scale in situ screens conducted by the Dawid, Talbot and Thisse laboratories as well as from cDNAs cited in the literature. These cDNA sequences are curated and associated with their encoding genes. In some cases, it is not possible to associate the cDNA with a published gene. In these cases, we create novel gene records. In addition, BAC clones used by the Sanger Institute genome sequencing project are captured in ZFIN.

Finding cDNA clones

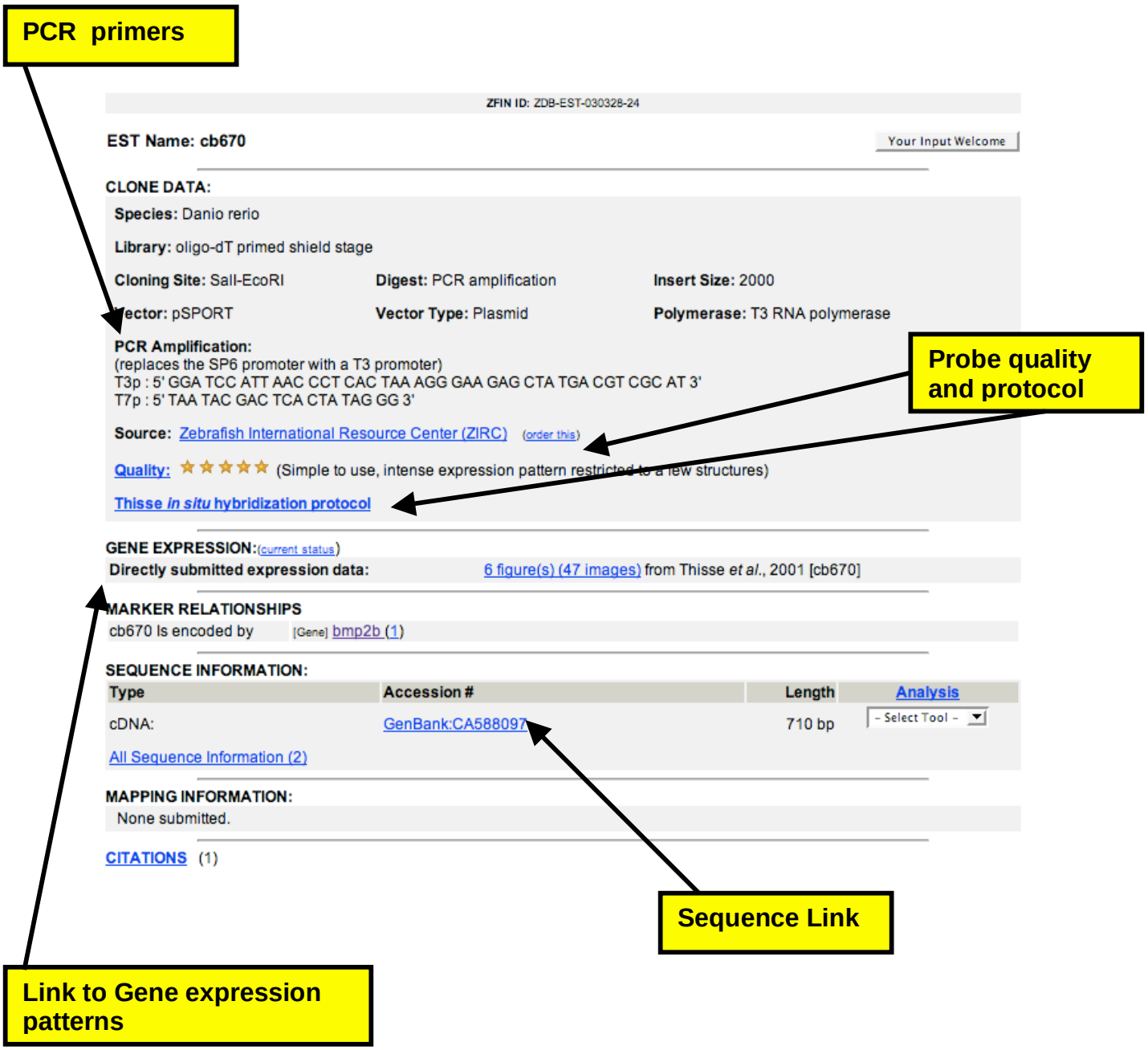
Links to cDNA clones and probe data can be found on ZFIN gene pages. Locate this information using our Genes/Markers/Clones query form, http://zfin.org/cgi-bin/webdriver?MIval=aa-newmrkrselect.apg. Search by specifying your gene of interest or accession number.



Scroll to the **Segment (Clone and Probe) Relationship** section of the gene page.



Click on the cb670 link to view details about this clone.



The Christine and Bernard Thisse have ranked probes from their large scale in-situ screens according to expression pattern quality. Probes with the highest ranking have the potential to be used as specific probes for an anatomical structure. These are also listed on the appropriate ZFIN anatomy page as High Quality Probes. Descriptions of the star ratings follow, from 5 start to 1 star.

- Simple to use, intense expression pattern restricted to a few structures.
- Nice strong expression pattern.
- Moderate expression pattern.
- Weak expression pattern.
- Probe is difficult to use. Generally basal level of expression with more intense labeling in particular structure.

Exercises

- Locate probes or clones that could be useful for studies of *fgf8*.
- Can you find a way to order these reagents?