



Bovine oligo annotation / Version 4

Jun 10th, 2009 / sigenasupport@jouy.inra.fr

Oligo-Set name : Roslin 24K Bovine oligonucleotide
Design date: 2005
Organism: ARK-Genomics@Roslin Institute
Oligo number: 23580

Length of oligos: 70

Sequences on which oligos have been designed:

The Bovine array is constructed from the collection of Oligonucleotides designed by Christine Elswick and her team at Texas A&M. Initial selection of sequences for the design of the oligonucleotides was taken from the Bovine Oligo Microarray Consortium (BOMC) Database which contains 16,846 oligo sequences as well as the best Ensembl protein matches and Gene Ontology (GO) annotations for each sequence. <http://www.bovineoligo.org>. These sequences have been supplemented with 703 predicted RefSeq genes with no alignment to the bovine genome, 5943 reproductive tissue ESTs with a Bovine genome alignment but no protein alignment to the vertebrate protein list, and 508 positive and negative controls.

Specificity analysis

The oligos have been aligned against the transcripts of the species or reference species. The alignment matches are shared between : hit = more than 85% of identity of the oligo length and noise = no hit but more than 20 bp without mismatch : Zhili He's & all 2005

No hit > 85%

-No noise 5644
-1 noise <20 bp 122 (*)
-1 noise >=20 bp 73 (*)
-Many noise 91

1 hit > 85%

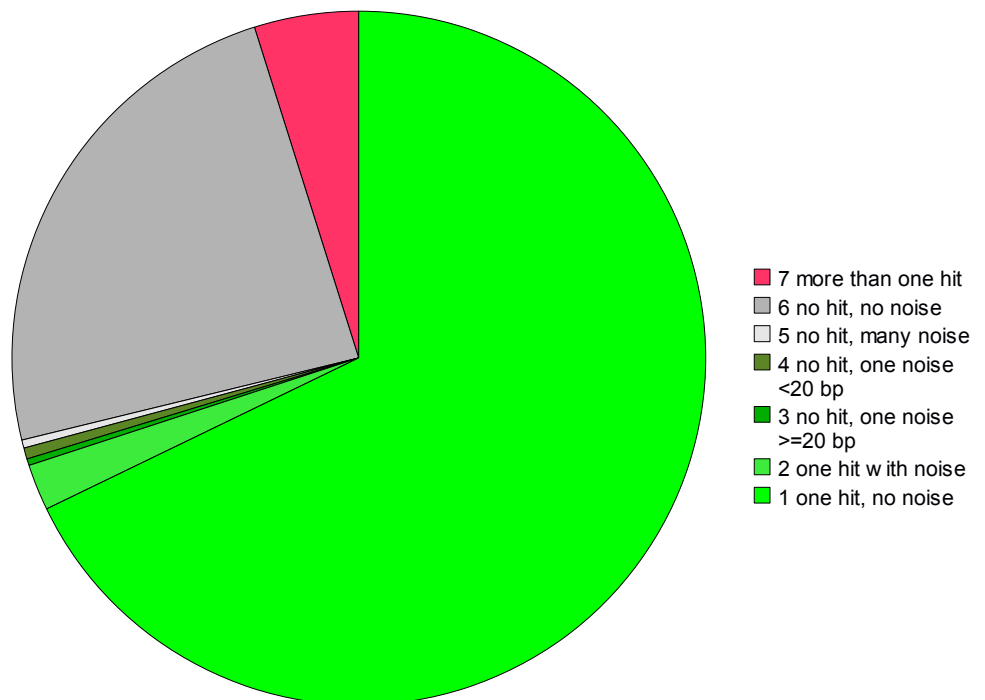
-No noise 15 995 (*)
-With noise 507 (*)

More than 1 hit

-With & without noise:
1148

(*): can be annotated.
Total: 16 697

oligo classification





ID GEO:

Annotation information

ID ArrayExpress:

Genome assembly : Btau_4.0, July 2008
Gene build Ensembl, July 2008
Ensembl version 54, May 2009

Gene coverage

The oligos which can be linked to a gene correspond to **13 234** different genes.

Probes annotated with orthologous Ensembl genes and Gene Ontology

Human	14 768	GO Molecular Function:	12 195
Mouse	14 434	GO Biological Process :	10 519
Rat	13 368	GO Cellular Component:	10 268

Probes having external reference link

Uniprot/SWISSPROT	5 446
UniGene	13 356
RefSeq_peptide	9 446

