



Cow oligo annotation / Version 5

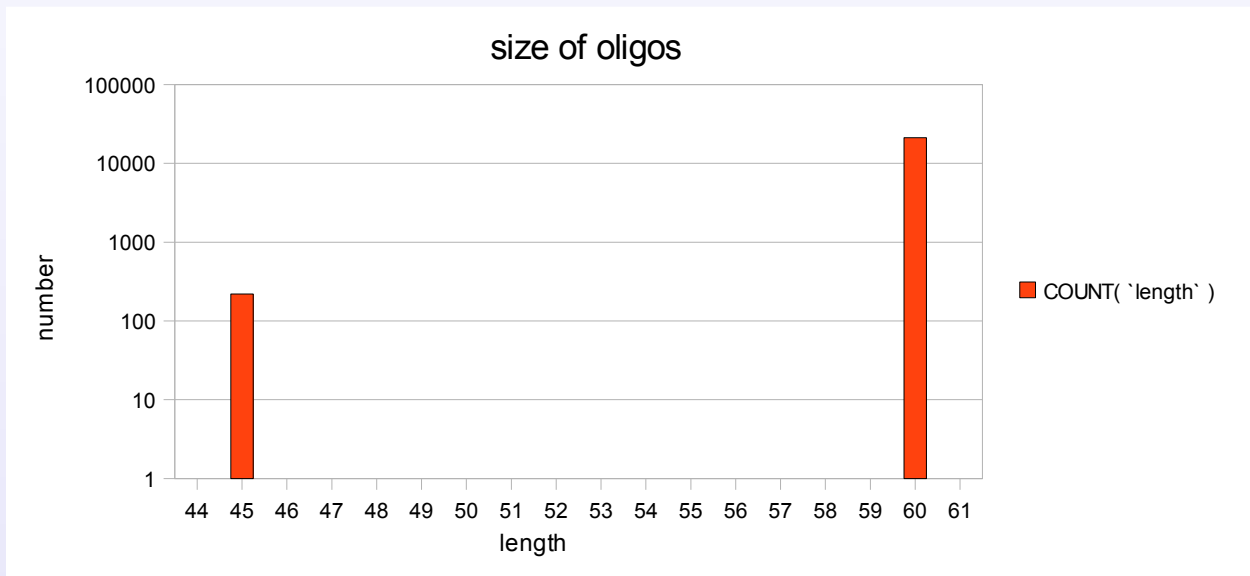
Nov 12th, 2009 / sigenasupport@jouy.inra.fr

Oligo-Set reference :

manufacturer : *agilent*
part number : *G2519F*
release date : *11/30/2006*
design ID number : *015354*
format : *44k*

Organism: *cow (bovine)*
Number of Oligo : *21475*

Length of oligos.



Sequences on which oligos have been designed:

Agilent's Bovine Oligo – 4X44K microarray covers 21,475 unique genes and transcripts of *Bos Taurus*, two probes for each gene are produced.

This array was designed in collaboration with ViaLactia, the majority of probe target sequences were extensively curated by expert biologists and contain dense functional annotation derived from their human orthologues.

Oligonucleotides, 60-mers, are synthesized directly on glass slide using the Agilent's SurePrint Technology.

ID GEO:

GPL7053

ID ArrayExpress:

Annotation information

Genome assembly :
Gene build
Ensembl version

Btau_4.0, Oct 2007
Ensembl, Jan 2009
56, Oct 2009





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

oligo classification

No hit > 85%

-No noise	5 799
-1 noise >=20 & <30 bp	365 (*)
-1 noise >= 30 bp	192 (*)
-Many noise	147

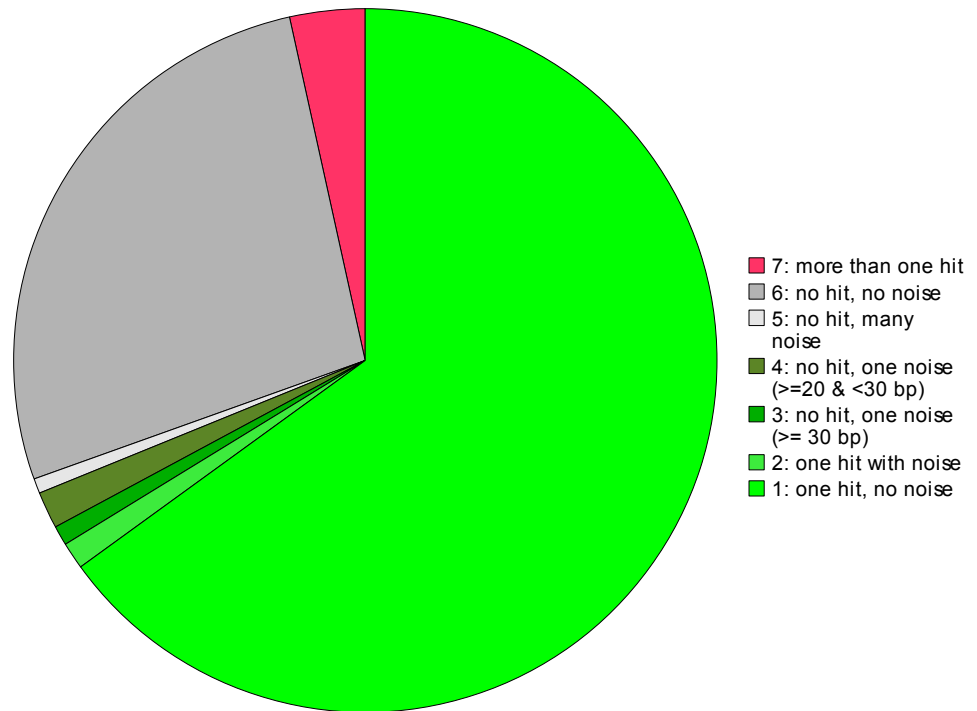
1 hit > 85%

-No noise	13 963 (*)
-With noise	266 (*)

More than 1 hit

-With & without noise	743
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(*): can be annotated.
Total: 14 786



Gene coverage

The oligos which can be linked to a gene correspond to 12 820 different genes.

Probes annotated with orthologous Ensembl genes and Gene Ontology

Human	12 625	GO Molecular Function :	11 571
Mouse	12 302	GO Biological Process :	9 985
Rat	11 525	GO Cellular Component :	9 940

Probes having external reference link

Uniprot/SWISSPROT	4 783
UniGene	11 432
RefSeq_peptide	8 313
HGNC	12 361

