# chromdb Database Tier by Jenny Su

TABLE NAMES: Gene, Protein, Codon, CodonUsage\_per\_chrom, CodonUsage\_per\_Entry

### **TABLE** Gene

Field	Туре	Null	Key	Default	Extra
Accession_No	varchar(20)	NO	PRI	NULL	
Gene_Identifier	varchar(200)	YES	MUL	NULL	
Chromosomal_location	varchar(200)	YES		NULL	
Organism	varchar(20)	YES		NULL	
Sequence_Length	int(11)	YES		NULL	
DNA_Sequence	longblob	YES		NULL	
CDS_start	int(11)	YES		NULL	
CDS_end	int(11)	YES		NULL	
CDS_sequence	text	YES		NULL	

### **TABLE Protein**

Field	Туре	Null	Key	Default	Extra
Accession_No	varchar(20)	NO	PRI	NULL	
Protein_id	varchar(20)	NO	PRI	NULL	
Protein_name	varchar(500)	YES	MUL	NULL	
Amino_acid_sequence	text	YES		NULL	

### **TABLE Codon**

Field	Туре	Null	Key	Default	Extra
Codon_id	int(11)	NO	PRI	NULL	auto_increment
Codon	char(3)	YES		NULL	
Amacid	char(6)	YES		NULL	

## TABLE CodonUsage\_per\_chrom

Field	Туре	Null	Key	Default	Extra
CodonUsage_Chrom_id	int(11)	NO	PRI	NULL	auto_increment
Amacid	char(6)	YES		NULL	
Codon	char(3)	YES		NULL	
Number	int(11)	YES		NULL	
per1000	decimal(10,5)	YES		NULL	
Fraction	decimal(10,5)	YES		NULL	
Codon_id	int(11)	YES	MUL	NULL	

# TABLE CodonUsage\_per\_Entry

Field	Туре	Null	Key	Default	Extra
CodonUsage_entry_id	int(11)	NO	PRI	NULL	auto_increment
Accession_No	varchar(20)	YES	MUL	NULL	
Amacid	char(3)	YES		NULL	
Codon	char(6)	YES		NULL	
Number	int(11)	YES		NULL	
per1000	decimal(10,5)	YES		NULL	
Fraction	decimal(10,5)	YES		NULL	
Codon_id	int(11)	YES	MUL	NULL	