**om_protein_sequence**

| id_sequence | VARCHAR(50) | <pk> | not null |
|---|---|---|---|
| id_protein | VARCHAR(50) | <fk> | not null |
| meta | TEXT | | not null |
| length | INT4 | | not null |
| pi | FLOAT8 | | null |
| average_mass | FLOAT8 | | null |
| monoisotopic_mass | FLOAT8 | | null |
| canonical | boolean | | not null |
| sequence | TEXT | | not null |
| last_update | DATE | | not null |

**om_protein**

| id_protein | VARCHAR(50) | <pk> | not null |
|---|---|---|---|
| id_gene | INT4 | <fk> | null |

fk_prot_seq_prot

fk_prot_gene

**om_gene_position**

| id_position | INT4 | <pk> | not null |
|---|---|---|---|
| id_ucsc | VARCHAR(20) | | null |
| id_ensembl | VARCHAR(50) | | null |
| id_assembly | VARCHAR(50) | <fk1> | not null |
| id_gene | INT4 | <fk2> | null |
| chrom | VARCHAR(20) | | not null |
| strand | VARCHAR(1) | | not null |
| tx_start | INT4 | | not null |
| tx_end | INT4 | | not null |
| cds_start | INT4 | | null |
| cds_end | INT4 | | null |
| exon_count | INT4 | | null |

fk_location_gene

**om_gene**

| id_gene | INT4 | <pk> | not null |
|---|---|---|---|
| gene_symbol | VARCHAR(50) | | null |
| title | VARCHAR(255) | | null |
| location | VARCHAR(100) | | null |
| status | VARCHAR(100) | | null |
| type | VARCHAR(100) | | null |
| date_modified | DATE | | null |
| last_update | DATE | | not null |

fk_gene_alias_gene

**om_gene_alias**

| id_gene | INT4 | <pk,fk> | not null |
|---|---|---|---|
| alias | VARCHAR(50) | <pk> | not null |
| database | VARCHAR(50) | | not null |

fk_location_assembly

**om_assembly**

| id_assembly | VARCHAR(50) | <pk> | not null |
|---|---|---|---|
| id_organism | INT4 | <fk> | not null |
| ucsc_code | VARCHAR(20) | | not null |
| name | VARCHAR(255) | | null |

fk_assembly_organism

**om_organism**

| id_organism | INT4 | <pk> | not null |
|---|---|---|---|
| name | VARCHAR(255) | | not null |

fk_hist_gene_before    fk_hist_gene_after

**om_gene_history**

| id_gene_before | INT4 | <pk,fk1> | not null |
|---|---|---|---|
| id_gene_after | INT4 | <pk,fk2> | not null |

**tx_log**

| last_activity | TIMESTAMP | <pk> | not null |
|---|---|---|---|
| module | VARCHAR(500) | | null |
| status | VARCHAR(255) | | null |
| comment | TEXT | | null |