SQL query allowing the computation of the POGs using SynteBase.

```sql
select b1.pid_1 as pid1_sp1,
b1.pid_2 as pid1_sp2,
b2.pid_1 as pid2_sp1,
b2.pid_2 as pid2_sp2
from ortho as b1,
ortho as b2,
protein as p1,
protein as p2,
protein as p3,
protein as p4
where p1.pid = b1.pid_1
AND p2.pid = b1.pid_2
AND p3.pid = b2.pid_1
AND p4.pid = b2.pid_2
AND p3.species_abrv=p1.species_abrv
and p4.species_abrv =p2.species_abrv
and p1.pid_new = (p3.pid_new+1)
and (p2.pid_new = (p4.pid_new+1) OR p2.pid_new = (p4.pid_new-1))
and p1.strand = p3.strand  and p2.strand = p4.strand;
```