between an N-terminal amino acid sequence and a C-terminal amino segment that has at least 90% sequence identity, respectively, to one of:

- a human lubricin N-terminal and C-terminal derived amino acid sequence;
- a canine lubricin N-terminal and C-terminal derived amino acid sequence; or
- an equine lubricin N-terminal and C-terminal derived amino acid sequence.

5. The recombinant lubricin polypeptide of claim **4**, wherein the contiguously repeated sequence is located between an N-terminal human lubricin derived sequence that has at least 90% sequence identity to the human lubricin sequence:

(SEQ ID NO: 75)
QDLSSCAGRCGEGYSRDATCNCDYNCQHYMECCPDFKRVCTAELSCKGR
CFESFERGRECDCDAQCKKYDKCCPDYESFCAEVHNPTSPPSSKKAPPP
SGASQTIKSTTKRSPKPPNKKKTKKVIESEEITEEHSVSENQESSSSSS
SSSSSSTIRKIKSSKNSAANRELQKKLKVKDNKKNRTKKKPTPKPPVVD
EAGSGLDNGDFKVTTPDTSTTQHNKVSTSPKITTAKPINPRPSLPPNSD
TSKETSLTVNKETTVETKETTTTNKQTSTDGKEKTTSAKETQSIEKTSA
KDLAPTSKVLAKPTPKAETTTKGPALTTP

and a C-terminal human lubricin amino derived amino acid sequence that has at least 90% sequence identity to the human lubricin sequence:

(SEQ ID NO: 76)
SEVSTPTTTKEPTTIHKSPDESTPELSAEPTPKALENSPKEPGVPTTKT
PAATKPEMTTTAKDKTTERDLRTTPETTTAAPKMTKETATTTEKTTESK
ITATTTQVTSTTTQDTTPFKITTLKTTTLAPKVTTTKKTITTTEIMNKP
EETAKPKDRATNSKATTPKPQKPTKAPKKPTSTKKPKTMPRVRKPKTTP
TPRKMTSTMPELNPTSRIAEAMLQTTTRPNQTPNSKLVEVNPKSEDAGG
AEGETPHMLLRPHVFMPEVTPDMDYLPRVPNQGIIINPMLSDETNICNG
KPVDGLTTLRNGTLVAFRGHYFWMLSPFSPPSPARRITEVWGIPSPIDT
VFTRCNCEGKTFFFKDSQYWRFTNDIKDAGYPKPIFKGFGGLTGQIVAA
LSTAKYKNWPESVYFFKRGGSIQQYIYKQEPVQKCPGRRPALNYPVYGE
TTQVRRRRFERAIGPSQTHTIRIQYSPARLAYQDKGVLHNEVKVSILWR
GLPNVVTSAISLPNIRKPDGYDYYAFSKDQYYNIDVPSRTARAITTRSG
QTLSKVWYNCP.

6. The recombinant lubricin of claim **5**, wherein the repeated sequence is KEPAPTTP (SEQ ID NO:1).

7. The recombinant lubricin polypeptide of claim **4**, wherein the contiguously repeated sequence is located between an N-terminal canine derived lubricin sequence that has at least 90% sequence identity to the canine lubricin sequence:

(SEQ ID NO: 77)
QDLPSCAGRCGEGYSRDAICNCDYNCQHYMECCPDFKKACTVELSCKGR
CFESFARGRECDCDSDCKKYGKCCPDYEDFCGRVHNPTSPPSSKTAPPS
PGASQTIKSTAKRSPKAPNKKKTKKVIESEEITEEHSVSENQESSSSSS
SSSSTIRKIKSSKNSAANKELKKKPKVKDNKKERTPKKKPPPEPPVVDE
AGSGLDNGDIKLTPTPDIPTTQRNKVTTSPKFTTGKPINPKPSLPPNTD
TSKETSSTPNKETTVKSKETLANKETSSKAKEKITSAKETRSAEKTPAK
DFVPTTKAPVKSTPKAESTTKGPALTTP

and a C-terminal canine lubricin derived amino acid sequence that has at least 90% sequence identity to the canine lubricin sequence:

(SEQ ID NO: 78)
SEVTTTAKDKTTEKDIIPEITTAVPKITTQETATPTEETTTESKTSTTT
QVTSTTSSKNTPKATTLAPKVMTATQKTTTTEETMNKPEETTAVPKDTA
TSTKVSTPRPRKPTKAPKKPASTKKPNTIPKRKKPKTTPTPPKMTTSTM
PKLUPTSSVEAMLQTTTSPNQRPNSEIVEVNPNEDTDAAGKKPHMFPRP
PVLTPIFIPGTDILVRGSNQDIAINPMLSDETNLCNGKPVDGLTTLRNG
TMVAFRGHYFWMLSPSKPPSPPRKITEVWGIPSPIDTVFTRCNCEGKTF
FFKGSQYWRFTNDIKDAGYPKQIVKGFGGLNGRIVAALSIAKYKDRPES
VYFFKRGGSVQQYTYKQEPIKKCTGRRPAINYPVYGETTQVRRRRFERA
IGPSQTHTIRIHYSPIRVSYQDKGFLHNEVKMSSQWRGFPNVVTSAIAL
PNIRKPDGYDYYAFSRNQYYNIDVPSRTARVVTTRFGRTLSNIWYNC.

8. The recombinant lubricin of claim **7**, wherein the repeated sequence is KEPAPTTP (SEQ ID NO:1).

9. The recombinant lubricin polypeptide of claim **4**, wherein the contiguously repeated sequence is located between an N-terminal equine derived lubricin sequence that has at least 90% sequence identity to the equine lubricin sequence:

(SEQ ID NO: 79)
QDLSSCAGRCGEGYSRDATCNCDFNCQYYMECCPDFKKVCTSELSCKGR
CFESFERGRECDCDADCKKYGKCCSDYESFCEEVHNPTSPPSSKTAPPP
PGASQTIKSTAKRSPKSNKKKTKKVIESEEIIEEHSVSENQESSSSSSS
SSSTIRKVKSSKNSAANRELKKKPKVKDSKKKRTPKKKPTPEPPVIDEA
GSGLDNGDFMLIPTPKIPTTQRNKVTTSPKITTVKPINPKPSLPPNSDT
SKETTSTPNKETTVETKETEITNKETSTSANEKTTSARKSTEKTSDKDF
APASEVPAKSTPKAETTTKGPALTTP

and a C-terminal equine lubricin derived amino acid sequence that has at least 90% sequence identity to the equine lubricin sequence:

(SEQ ID NO: 80)
SEVSTTTTTMKPPTTPKNLAESTPEFPAEPTPKALENSPKEPAVPTTKA
PEVTKPEVTTTAKDKVTGKDIHTIPEITTAAPKITTETATTTEEKTTES