IMGT/HighV-QUEST, IMGT/DomainGapAlign and IMGT/mAb-DB: novel IMGT® contribution for antibody engineering and humanization

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http://www.imgt.org

IMGT, the international ImMunoGeneTics information system® (http://www.imgt.org) provides a standardized way to contain immunogenetic sequences and to identify the FR-MBT and CDR-MBT of the process of antibody functionalization and engineering, whatever the chain type (heavy and light), whatever the species (humans and mouse). IMGT is based on the IMGT/GENE-DOMAIN database and on the IMGT/HLA database (human major histocompatibility complex). IMGT provides the IMGT/GENE-ART database (IMGT® gene-art® nomenclature) and of immunogenetics (IMGT® unique numbering). IMGT/HighV-QUEST analyses NGS data (454 or 473 sequences per batch). IMGT/DomainGapAlign analyzes array and sequences that string. The IMGT/HighV-QUEST and IMGT/DomainGapAlign tools provide the information of the FR-MBT (CDR-MBT) for the analysis of antibody engineering or new guidelines for antibody engineering.

The IMGT/DomainGapAlign is one of the IMGT databases and tools, based on the IMGT/DB database, bridge the gap between sequences and 3D structures facilitating the analysis of antibody engineering.

The IMGT database for therapeutic monoclonal antibodies

Analysis of antibody sequences:

IMGT/DomainGapAlign

IMGT/Collier-de-Perles

IMGT/3Dstructure-DB contact analysis

IMGT/HighV-QUEST

IMGT/Collier-de-Perles

IMGT/HighV-QUEST and IMGT/JunctionAnalysis

High-Throughput analysis of NGS rearranged nucleotide sequences of IG and TR

IMGT/HighV-QUEST is a high-throughput tool for the analysis of rearranged nucleotide sequences of IG and TR.

Newly added:

- IMGT/HighV-QUEST
- IMGT/DomainGapAlign
- IMGT/mAb-DB
- IMGT/3Dstructure-DB contact analysis

The IMGT database for therapeutic monoclonal antibodies

IMGT/Collier-de-Perles

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