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[54] IMMUNOGLOBULIN VARIANTS

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[52] U.S. Cl. **530/387.3; 530/350; 530/388.2;**
424/133.1

[58] Field of Search **530/387.3, 350,**
530/388.2; 424/133.1

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[57] ABSTRACT

Variant immunoglobulins, particularly humanized antibody polypeptides are provided, along with methods for their preparation and use. Consensus immunoglobulin sequences and structural models are also provided.

15 Claims, 12 Drawing Sheets

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FIG. 1A

| | | | | |
|---------------------|---|----|----------------------|----|
| | 10 | 20 | 30 | 40 |
| 4D5 | DIVMTQSHKFMSTSVGDRVSITCKASQDVNTAVAWYQQKPGHSPKLL | | | |
| | | | | |
| HU4D5 | DIQMTQSPSSLSASVGDRVTITCRASQDVNTAVAWYQQKPGKAPKLL | | | |
| | | | | |
| HUV _L κI | DIQMTQSPSSLSASVGDRVTITCRASQDVSSYLAWYQQKPGKAPKLL | | | |
| | | | ----- | |
| | | | ----- | |
| | | | V _L -CDR1 | |

| | | | | | |
|---------------------|---|----|----|----------------------|-----|
| | 60 | 70 | 80 | 90 | 100 |
| 4D5 | GVPDRFTGNRSGTDFFTFTISSVQAEDLAVYYCQQHYTTPPTFGGGT | | | | |
| | | | | | |
| HU4D5 | GVPSRFSGSRSGTDFTLTISSLQPEDFATYYCQQHYTTPPTFGQGT | | | | |
| | | | | | |
| HUV _L κI | GVPSRFSGSGSGTDFTLTISSLQPEDFATYYCQQYNSLPYTFGQGT | | | | |
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