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[54] **SULFATED LIGANDS FOR L-SELECTIN AND METHODS OF TREATING INFLAMMATION**

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[52] **U.S. Cl.** **514/61; 514/25; 514/53;**
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[58] **Field of Search** **514/25, 53, 54,**
514/62, 61; 536/4.1, 17.2, 18.7, 53, 54,
55.1, 55.2, 55

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[57] **ABSTRACT**

Sulfated oligosaccharides which bind to L-selectin receptors and act as agonists are formulated into pharmaceutical formulations and administered by injection to treat inflammation. Compounds which act as metabolic inhibitors of carbohydrate sulfation and inhibit the sulfation of naturally occurring ligands for L-selectin receptors are administered locally by injection to alleviate and/or prevent inflammation. The sulfated oligosaccharides can be administered in combination with the chlorates and sulfatases in order to obtain a combined effect which is useful in preventing and/or alleviating inflammation. A preferred group of ligands are obtained by the hydrolysis of GlyCAM-1 by separation procedures including high pH anion exchange chromatography. The invention describes compounds that have the recognition determinants for L-selectin on GlyCAM-1 as Galactose-6-sulfate and/or N-acetylglucosamine-6-sulfate, in concert with sialic acid and fucose.

18 Claims, 9 Drawing Sheets