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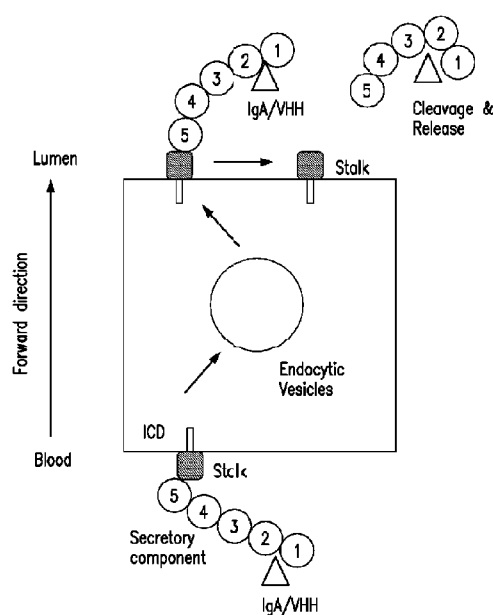


FIG. 1A

(57) Abstract: A method is described for delivering a single domain antibody or a therapeutic molecule from an apical surface of a polymeric immunoglobulin receptor (pIgR)-expressing cell to a basolateral surface of the pIgR-expressing cell comprising contacting the pIgR-expressing cell with the single domain antibody or the therapeutic molecule, wherein the single domain antibody binds to pIgR, and the therapeutic molecule comprises an agent and the single domain antibody. A method is also described for transporting such a therapeutic molecule to systemic circulation or lamina propria or gastrointestinal tract of a subject comprising administering the therapeutic molecule to the subject via oral delivery, buccal delivery, nasal delivery or inhalation delivery.

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