

ABSTRACT

The present invention belongs to the field of medical biotechnology, and particular relates to a Reticulocyte Growth Factor (RGF) and a preparing method and application thereof. The factor is separated and purified from impurities of α_1 -antitrypsin (from human
5 plasma), and the fragment of a precursor of the antitrypsin is determined, and has very high function of promoting the generation of the reticulocyte of mice. Monoclonal antibody of EPO is not combined with the reticulocyte growth factor, which is labeled with I^{125} , after the reticulocyte growth factor is combined with surface receptors of mouse bone marrow cells, the EPO cannot compete with the reticulocyte growth factor. The EPO and RGF are
10 labeled with different fluorochromes, and it is proved that they have different receptors. The factor and EPO are injected into the mice or aplastic anemia mice, and an obvious synergistic effect for promoting the generation of the reticulocyte 、 red cell and leukocyte is generated. The reticulocyte growth factor can be used for preparing the medicine for treating severe anemia.

15 [FIG. 1]