This research was conducted to develop an efficient protocol for *in vitro* propagation of *Sedum adolphii* Raym. Hamet by direct organogenesis. Various parts of the plant were considered for use as explants. Among them, leaves demonstrated the highest success rate, thus becoming the preferred choice. Surface sterilization was carried out by treating the explant with 70 % ethanol and 1 % bleach. MS medium supplemented with different PGRs, was used for the culturing of explant. The influence of PGRs was observed in terms of the number of leaves, number of roots and root length. The effects of TDZ, KIN, and BAP under a concentration ranges of 0.5 to 2.0 mg/l were investigated for the regeneration of cultured explant. The application of these cytokinins separately to the cultured explant resulted in sprouting of leaves without roots. It was noticed that BAP (2.0 mg /l) responded best among all the cytokinins for direct organogenesis of leaves in the cultured explants. The effects of IBA, 2,4-D, and NAA under the concentration range of 0.5 to 2.0 mg/l were also investigated for the regeneration of cultured explant. 2,4-D proved to be the best for root induction in the cultured explants. Combinations of cytokinins with auxins responded in terms of direct organogenesis of shoots adorned with leaves and roots. Among the combinations BAP + 2,4-D (2.0 +1.5 mg/l) appeared to be the best for the maximum number of leaves on the shoot as compared to other concentrations of this combination. Combination of KIN + NAA (1.5+1.0 mg/l) proved to be the best for the maximum number of leaves with maximum roots. Another combination i.e., TDZ+IBA (2.0+1.5 mg/l) resulted in the emergence of shoots adorned with maximum number of leaves and maximum number of roots. It has proven the best combination for direct organogenesis in the cultured explants and also helped in the development of an efficient protocol for the clonal propagation of *S. adolphii*.