EXCLI Journal 2021;20:601-613 – ISSN 1611-2156
Received: September 21, 2020, accepted: March 03, 2021, published: March 09, 2021

Supplementary information to:

Original article:

INHIBITION OF TRANSFORMING GROWTH FACTOR-BETA BY TRANILAST REDUCES TUMOR GROWTH AND AMELIORATES FIBROSIS IN COLORECTAL CANCER

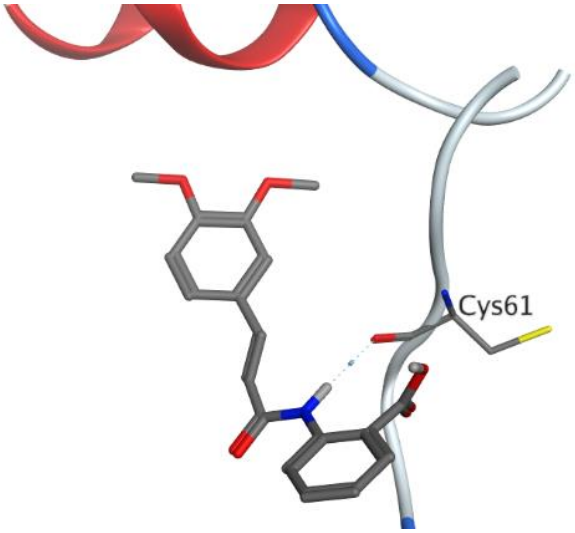
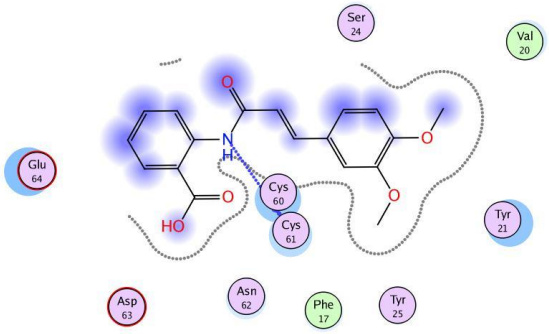
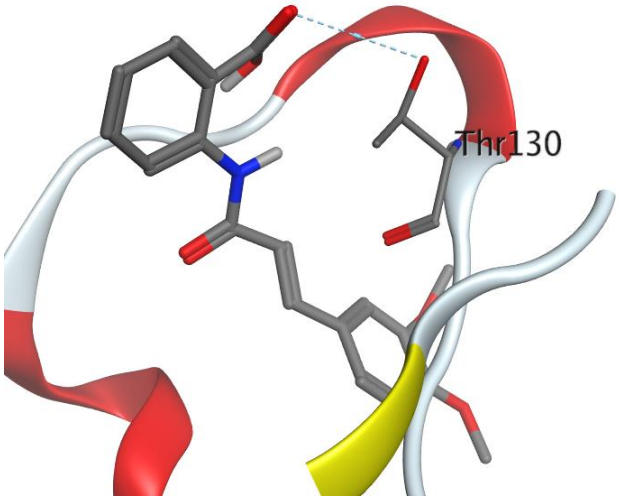
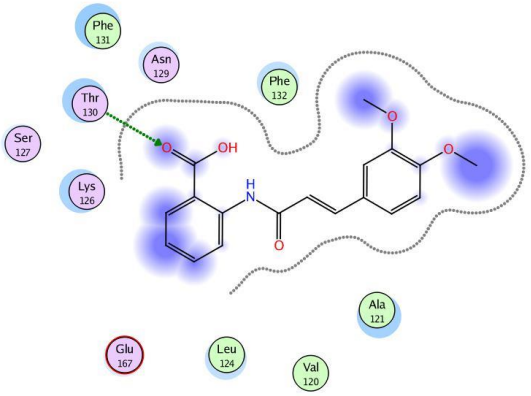
Milad Hashemzehi[1,2,*], Negar Yavari[3,*], Farzad Rahmani[2], Fereshteh Asgharzadeh[1], Atena Soleimani[4], Neda Shakour[5,6], Amir Avan[7,8,*], Farzin Hadizadeh[5,9], Maryam Fakhraie[1], Reyhaneh Moradi Marjaneh[1], Gordon A. Ferns[10], Parham Reisi[3], Mikhail Ryzhikov[11], Majid Khazaei[1,7#], Seyed Mahdi Hassanian[4,7#]

1 Department of Medical Physiology, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran
2 Tropical and Communicable Diseases Research Centre, Iranshahr University of Medical Sciences, Iranshahr, Iran
3 Department of Medical Physiology, School of Medicine, Isfahan University of Medical Sciences, Isfahan, Iran
4 Department of Clinical Biochemistry, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran
5 Department of Medicinal Chemistry, School of Pharmacy, Mashhad University of Medical Sciences, Mashhad, Iran
6 Student Research Committee, Mashhad University of Medical Sciences, Mashhad, Iran
7 Metabolic Syndrome Research Center, Mashhad University of Medical Sciences, Mashhad, Iran
8 Student Research Committee, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran
9 Biotechnology Research Center, Pharmaceutical Technology Institute, Mashhad University of Medical Sciences, Mashhad, Iran
10 Brighton & Sussex Medical School, Division of Medical Education, Falmer, Brighton, Sussex BN1 9PH, UK
11 Saint Louis University, School of Medicine, St. Louis, MO, USA
* These authors contributed equally as first author.

Corresponding authors: Majid Khazaei, MD, Ph.D., Department of Medical Physiology, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran. Phone: (+98) 5138002227, Fax: (+98) 5138002389, E-mail: KhazaeiM@mums.ac.ir
Seyed Mahdi Hassanian, Ph.D., Department of Clinical Biochemistry, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran. Phone: (+98) 5138002375, Fax: (+98) 5138002389, E-mail: hasanianmehrm@mums.ac.ir

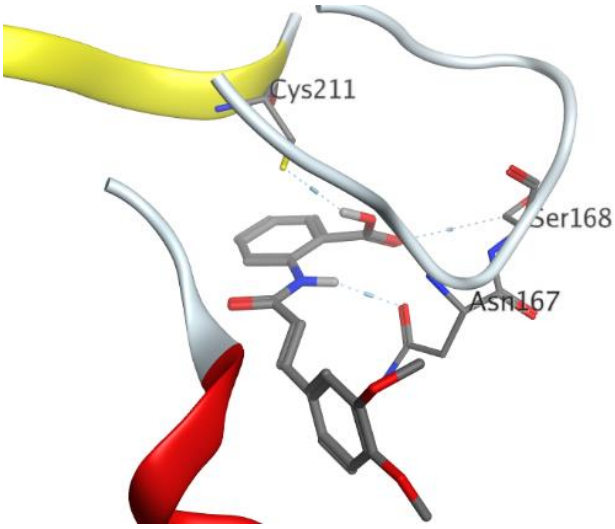
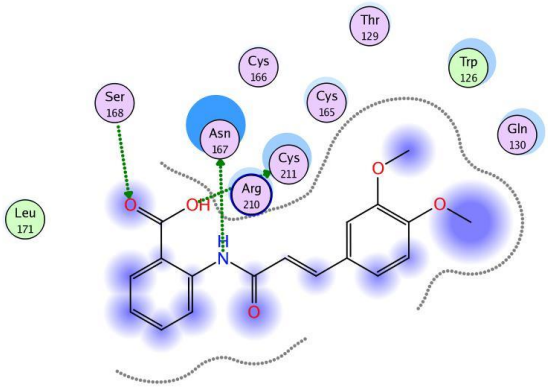
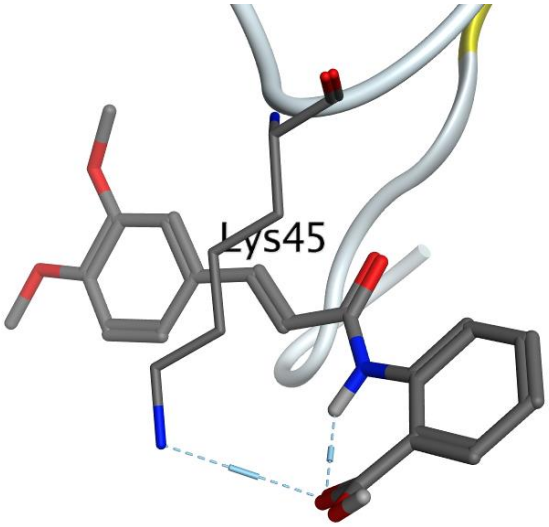
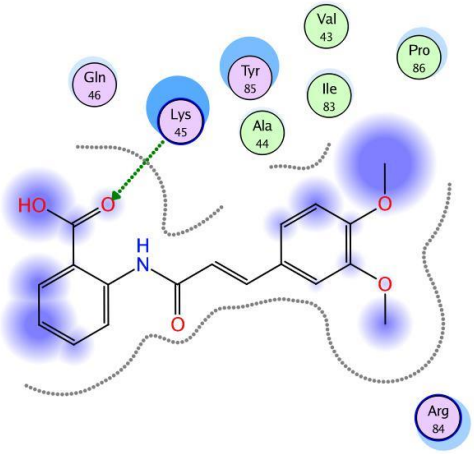
http://dx.doi.org/10.17179/excli2020-2932

EXCLI Journal 2021;20:601-613 – ISSN 1611-2156
Received: September 21, 2020, accepted: March 03, 2021, published: March 09, 2021

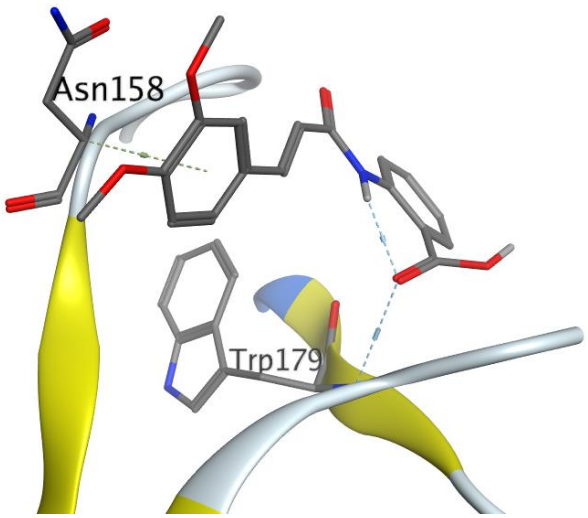
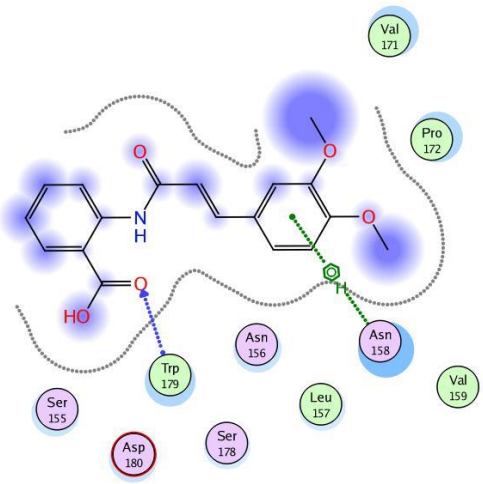
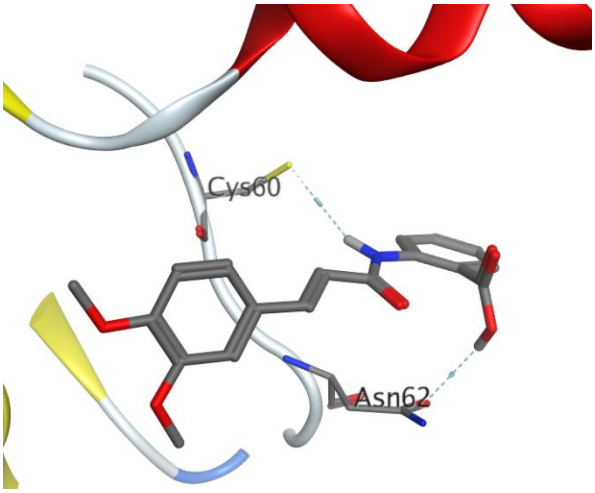
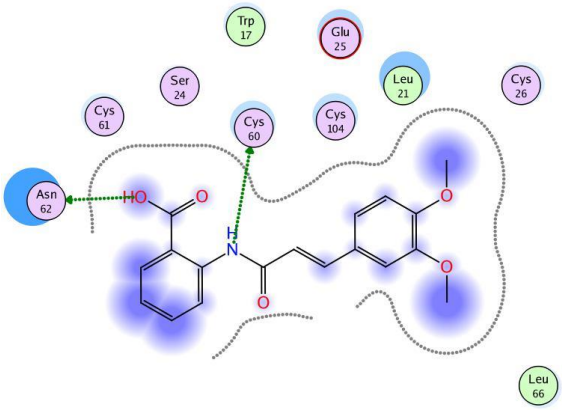
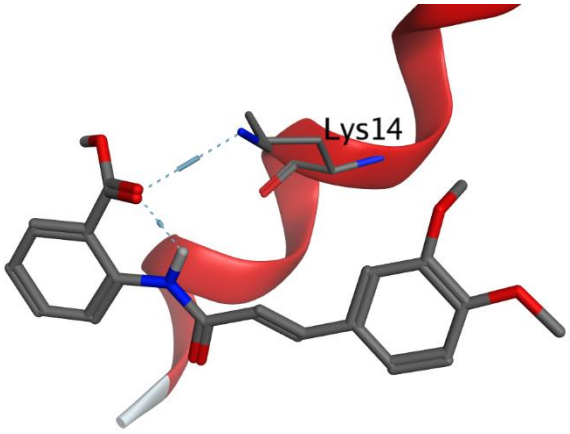
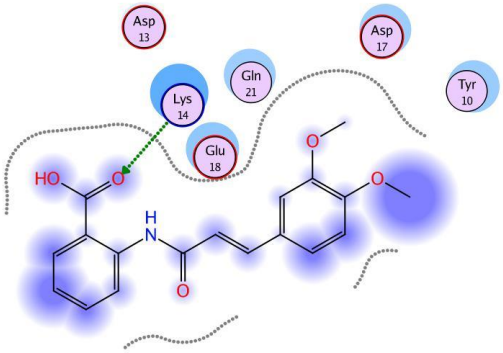
Receptors	Docking 3D representation	Docking 2D representation
VEGF-A		
[1]VEGF-D		

[1] Vascular Endothelial Growth Factor-D

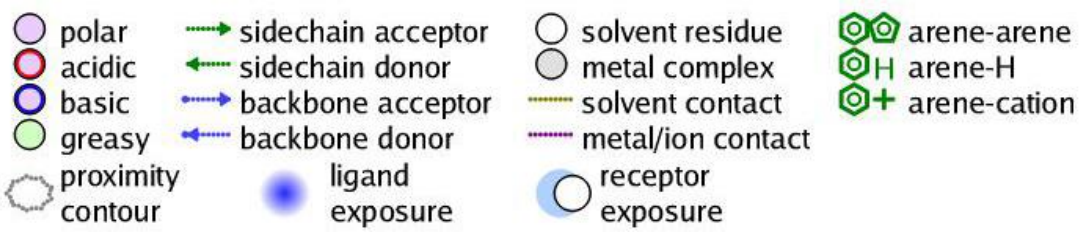
EXCLI Journal 2021;20:601-613 – ISSN 1611-2156
Received: September 21, 2020, accepted: March 03, 2021, published: March 09, 2021

VEGF-C		
VEGF-B		

EXCLI Journal 2021;20:601-613 – ISSN 1611-2156
Received: September 21, 2020, accepted: March 03, 2021, published: March 09, 2021

VEGFR2		
VEGF-E		
SARA		

EXCLI Journal 2021;20:601-613 – ISSN 1611-2156
Received: September 21, 2020, accepted: March 03, 2021, published: March 09, 2021



Supplementary Figure 1: The protein structure in 3D dimensions (left column) and 2D dimensions (right column) for proteins VEGFR (VEGFR1, VEGFR2, VEGFR3), ALK5, SMAD (2,3,4), VEGF (A, B, C, D, E), TBRII, Col1A1, Col1A2, and SARA