

No.	Product Description	Year	Title	Author	Article Information	IF (2020)
1	Gene	2019	Plexin B2 Is a Regulator of Monocyte	Georgia K. Atkin-Smith, Mark A.	Cell Reports. 29,	9.423
	Synthesis		Apoptotic Cell Disassembly	Miles, Rochelle Tixeira, Fung T. Lay,	1821-1831.e3	
	Service			Mubing Duan, Christine J. Hawkins,		
				Thanh Kha Phan, Stephanie Paone,		
				Suresh Mathivanan, Mark D. Hulett,		
				Weisan Chen, and Ivan K.H. Poon		
2	Gene	2019	A Plant Virus-Based Vector System for Gene	Boram Choi, Sun-Jung Kwon,	Plant Physiology.	6.902
	Synthesis		Function Studies in Pepper	Myung-Hwi Kim, Siwon Choe, Hae-	<i>181,</i> 867-880	
	Service			Ryun Kwak, Mi-Kyeong Kim,		
				Choonkyun Jung, and Jang-Kyun		
				Seo		
3	Gene	2019	A negative feedback loop between XBP1 and	Unbin Chae, Heejin Lee, Bokyung	Oncogenesis. 8, 12	6.73
	Synthesis		Fbw7 regulates cancer development	Kim, Haiyoung Jung, Byeong Mo		
	Service			Kim, Ann- Hwee Lee, Dong-Seok		
				Lee, and Sang-Hyun Min		
4	Gene	2019	mRNA Engineering for the Efficient	Le Minh Bui, Almando Geraldi, Thi	International Journal	5.923
	Synthesis		Chaperone-Mediated Co-Translational	Thuy Nguyen, Jun Hyoung Lee, Ju	of Molecular	
	Service		Folding of Recombinant Proteins in	Young Lee, Byung-Kwan Cho, and	Sciences. 20, 3163	
			Escherichia coli	Sun Chang Kim		
5	Gene	2019	Efficient Generation of Human IgG1 Light	Sundo Jung	Biomedical Science	5.762
	Synthesis		Kappa Constant Region Knock-in Mouse by		Letters. 25, 372-380	
	Service		CRISPR/Cas9 System			



6	Gene	2019	A functional regulatory variant of MYH3	In-Cheol Cho, Hee-Bok Park, Jin	PLOS Genetics. 15,	5.33
	Synthesis		influences muscle fiber-type composition and	Seop Ahn, Sang-Hyun Han, Jae-	e1008279	
	Service		intramuscular fat content in pigs	Bong Lee, Hyun-Tae Lim, Chae-		
				Kyoung Yoo, Eun-Ji Jung, Dong-		
				Hwan Kim Wu-Sheng Sun, Yuliaxis		
				Ramayo-Caldas, Sang-Geum Kim,		
				Yong-Jun Kang, Yoo-Kyung Kim,		
				Hyun-Sook Shin, Pil-Nam Seong, In-		
				Sul Hwang, Beom-Young Park,		
				Seongsoo Hwang,		
				Sung-Soo Lee, Youn-Chul Ryu, Jun-		
				Heon Lee, Moon-Suck Ko, Kichoon		
				Lee, Göran Andersson, Miguel		
				Pérez-Enciso, and Jeong-Woong Lee		
7	Gene	2019	Recombinant lignin peroxidase-catalyzed	Ho Joon Sung, Mohd Faheem Khan,	International Journal	5.162
	Synthesis		decolorization of melanin using in-situ	and Yong Hwan Kim	of Biological	
	Service		generated H2O2 for application in whitening		Macromolecules.	
			cosmetics		<i>136</i> , 20-26	
8	Gene	2019	Type II Ice-Binding Proteins Isolated from an	Sung Mi Cho, Sanghee Kim, Hojin	Plant and Cell	4.927
	Synthesis		Arctic Microalga Are Similar to Adhesin-Like	Cho, Hyoungseok Lee, Jun Hyuck	Physiology. 60, 2744-	
	Service		Proteins and Increase Freezing Tolerance in	Lee, Horim Lee, Hyun Park,	2757	
			Transgenic Plants	Seunghyun Kang, Han-Gu Choi, and		
				Jungeun Lee		
9	Gene	2019	Overcoming NADPH product inhibition	Tae-Su Kim, Hui Gao, Jinglin Li,	Scientific Reports. 9,	4.793
	Synthesis		improves D-sorbitol conversion to L-sorbose	Vipin C. Kalia, Karthikeyan	815	



	Service			Muthusamy, Jae Kyung Sohng, In-		
				Won Kim, and Jung-Kul Lee		
10	Gene	2019	Structures of three ependymin-related	Jeong Kuk Park, Keon Young Kim,	<i>IUCrJ. 6,</i> 729-739	4.769
	Synthesis		proteins suggest their function as a	Yeo Won Sim,a Yong-In Kim,b Jin		
	Service		hydrophobic molecule binder	Kyun Kim,c Cheol Lee,c Jeongran		
				Han,d Chae Un Kim,c J. Eugene		
				Leeb, and SangYoun Park		
11	Gene	2019	nhanced Expression and Functional	Zhili Rao, So Young Kim, Md	Molecules and Cells.	4.58
	Synthesis		Characterization of the Recombinant Putative	Rashedunnabi Akanda, Su Jin Lee, In	<i>42,</i> 262-269	
	Service		Lysozyme-PMAP36 Fusion Protein	Duk Jung, Byung-Yong Park,		
				Seralathan Kamala-Kannan, Jin Hur,		
				and Jung Hee Park		
12	Gene	2019	Structural and <i>In Vitro</i> Functional Analyses of	Kaewta Rattanapisit, Tanapati	Scientific Reports. 9,	4.379
	Synthesis		Novel Plant-Produced Anti-Human PD1	Phakham, Supranee	15205	
	Service		Antibody	Buranapraditkun, Konlavat		
				Siriwattananon, Chatikorn Boonkrai,		
				Trairak Pisitkun, Nattiya Hirankarn,		
				Richard Strasser, Yoshito Abe, and		
				Waranyoo Phoolcharoen		
13	Gene	2019	Engineering of anti-human interleukin-4	Jung-Eun Kim, Keunok Jung, Jeong-	Scientific Reports. 9,	4.379
	Synthesis		receptor alpha antibodies with potent	Ah Kim, Seung-Hyun Kim, Hae-Sim	7772	
	Service		antagonistic activity	Park, and Yong-Sung Kim		
14	Gene	2019	Liver-specific Gene Delivery Using Engineered	Eun Byul Lee, Jung-Hee Kim,	Scientific Reports. 9,	4.379
	Synthesis		Virus-Like Particles of Hepatitis E Virus	Wonhee Hur, Jung Eun Choi, Sung	1616	
	Service			Min Kim, Dong Jun Park, Byung-		



				Yoon Kang, Gil Won Lee, and Seung		
				Kew Yoon		
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15	Gene	2019	Tyrosine 51 residue of the syndecan-2	Bohee Jang, Ji-Hye Yun, Sojoong	Scientific Reports. 9,	4.379
	Synthesis		extracellular domain is involved in the	Choi, Jimin Park, Dong Hae Shin,	10625	
	Service		interaction with and activation of pro-matrix	Seung-Taek Lee, Weontae Lee, and		
			metalloproteinase-7	Eok-Soo Oh		
16	Gene	2019	Construction of an immunotoxin via site-	Byeong Sung Lee, Yumi Lee, Jisoo	Journal of Biological	4.355
	Synthesis		specific conjugation of anti-Her2 IgG and	Park, Bo Seok Jeong, Migyeong Jo,	Engineering. 13, 56	
	Service		engineered <i>Pseudomonas</i> exotoxin A	Sang Taek Jung, and Tae Hyeon Yoo		
17	Gene	2019	Mevalonate production from ethanol by	Jeongmo Yang, Ji Hee Son,	Microbial Cell	4.187
	Synthesis		direct conversion through acetyl-CoA using	Hyeonsoo Kim, Sukhyeong Cho,	Factories. 18, 168	
	Service		recombinant <i>Pseudomonas putida</i> , a novel	Jeong-geol Na, Young Joo Yeon,		
			biocatalyst for terpenoid production	and Jinwon Lee		
18	Gene	2019	A Fusion Protein of Derp2 Allergen and	Wenzhi Tan, Jin Hai Zheng, Tra-My	Allergy, Asthma and	4.157
	Synthesis		Flagellin Suppresses Experimental Allergic	Nu Duong, Young-Il Koh, Shee Eun	Immunology	
	Service		Asthma	Lee, and Joon Haeng Rhee	Research. 11, 254-	
					266	
19	Gene	2019	Enhanced (–)-α-Bisabolol Productivity by	Soo-Jung Kim, Seong Keun Kim,	Catalysts. 9, 432	4.146
	Synthesis		Efficient Conversion of Mevalonate in	Wonjae Seong, Seung-Gyun Woo,		
	Service		Escherichia coli	Hyewon Lee, and Soo-Jin Yeom,		
				Haseong Kim, Dae-Hee Lee, and		
				Seung-Goo Lee		
20	Gene	2019	Released Tryptophanyl-tRNA Synthetase	Hyun-Cheol Lee, Eun-Seo Lee, Md	Journal of Virology.	3.616
	Synthesis		Stimulates Innate Immune Responses against	Bashir Uddin, Tae-Hwan Kim, Jae-	<i>93</i> , e01291-18	
	Service		Viral Infection	Hoon Kim, Kiramage Chathuranga,		



				W A Gayan Chathuranga, Mirim Jin, Sunghoon Kim, Chul-Joong Kim, and Jong-Soo Lee		
21	Gene Synthesis Service	2019	Receptor Binding Affinities of Synthetic Cannabinoids Determined by Non-Isotopic Receptor Binding Assay	Hye Jin Cha, Yun Jeong Song, Da Eun Lee, Young-Hoon Kim, Jisoon Shin, Choon-Gon Jang, Soo Kyung Suh, Sung Jin Kim, and Jaesuk Yun	Toxicology Research. 35, 37-44	3.524
22	Gene Synthesis Service	2019	Efficient production of levan using a recombinant yeast <i>Saccharomyces cerevisiae</i> hypersecreting a bacterial levansucrase	Hyunjun Ko, Jung-Hoon Bae, Bong Hyun Sung, Mi-Jin Kim, Chul-Ho Kim, Baek-Rock Oh, and Jung-Hoon Sohn	Journal of Industrial Microbiology and Biotechnology. 46, 1611-1620	3.346
23	Gene Synthesis Service	2019	Characteristics of flavonoids as potent MERS-CoV 3C-like protease inhibitors	Seri Jo, Hyojin Kim, Suwon Kim, Dong Hae Shin, and Mi-Sun Kim	Chemical Biology and Drug Design. 94, 2023-2030	2.57
24	Gene Synthesis Service	2019	Detection of Sacbrood Virus Infecting Apis cerana (AcSBV) Using Polyclonal Antibody Raised against Recombinant VP3 Capsid Protein Expressed in <i>Escherichia coli</i>	Sung Oh	Journal of Apiculture. 34, 149-156	2.38
25	Gene Synthesis Service?	2019	Efficient Interleukin-21 Production by Optimization of Codon and Signal Peptide in Chinese Hamster Ovarian Cells	Hee Jun Cho, Byung Moo Oh, Jong- Tae Kim, Jeewon Lim, Sang Yoon Park, Yo Sep Hwang, Kyoung Eun Baek, Bo-Yeon Kim, Inpyo Choi, and Hee Gu Lee	Journal of Microbiology and Biotechnology. 29, 304-310	1.992
26	Gene Synthesis	2019	Development of an Equine Antitoxin by Immunizing the Halla Horse with the	Na Young Kim, Kyung-eui Park, Yong Jin Lee, Yeong Mun Kim, Sung	Journal of Microbiology and	1.992



	Service		Receptor-Binding Domain of Botulinum	Hyun Hong, Won Rak Son,	Biotechnology. 29,	
			Neurotoxin Type A1	Sungyoul Hong, Saehyung Lee, Hye	1165-1176	
				Bin Ahn, Jaehyuk Yang, Jong-pil Seo,		
				Yoon-Kyu Lim, Chi Ho Yu, Gyeung		
				Haeng Hur, Seong Tae Jeong, Hun		
				Seok Lee, Kyoung Song, Tae Jin		
				Kang, Young Kee Shin, Joon-Seok		
				Choi, and Jun Young Choi		
27	Gene	2019	Effect of Fc Fusion on Folding and	Jungmin Chun, Yeondong Cho, Ki	Journal of	1.992
	Synthesis		Immunogenicity of Middle East Respiratory	Hoon Park, Hanul Choi, Hansam	Microbiology and	
	Service		Syndrome Coronavirus Spike Protein	Cho, Hee-Jung Lee, Hyun Jang,	Biotechnology. 29,	
				Kyung Hyun Kim, Yu-Kyoung Oh,	813-819	
				and Young Bong Kim		
28	Gene	2019	14-3-3ζ protein protects against brain	Naeemeh Khalesi, Mojgan	Journal of Applied	1.85
	Synthesis		ischemia/reperfusion injury and induces	Bandehpour, Mohammad Reza	Biomedicine.	
	Service		BDNF transcription after MCAO in rat	Bigdeli, Hassan Niknejad, Ali		
				Dabbagh, and Bahram Kazemi		
29	Gene	2019	Enhancement of antigen-specific humoral	Seo-ho Oh, Young-Saeng Kim Cho,	Journal of Veterinary	1.561
	Synthesis		immune responses and protein solubility	Ho-Bin Lee, Sang-Mok Lee, Whee-	<i>Science. 20,</i> e70	
	Service		through conjugation of bacterial flagellin,	Soo Kim, Liang Hong, Chong-Su		
			Vibrio vulnificus FlaB, to the N-terminus of	Cho, Yun-Jaie Choi, and Sang-Kee		
			porcine epidemic diarrhea virus surface	Kang		
			protein antigen S0			
30	Gene	2019	An attenuated <i>Salmonella</i> vaccine secreting	Suyeon Park, Gayeon Won, and	Journal of Veterinary	1.561
	Synthesis		Lawsonia intracellularis immunogenic	John Hwa Lee	<i>Science. 20,</i> e24	



	Service		antigens confers dual protection against			
			porcine proliferative enteropathy and			
			salmonellosis in a murine model			
31	Gene	2019	Effect of Amino Acid Substitutions on	Parvaneh Panahi Chegini, Iraj	Iranian Journal of	1.505
	Synthesis		Biological Activity of Antimicrobial Peptide:	Nikokar, Maryam Tabarzad, Sobhan	Pharmaceutical	
	Service		Design, Recombinant Production, and	Faezi,b, and Arash Mahboubi	Research. 18, 157-	
			Biological Activity		168	
32	Gene	2019	Enhancing Stability of Destabilized Green	Setare Adibzadeh, Majid Fardaei,	Avicenna Journal of	1.44
	Synthesis		Fluorescent Protein Using Chimeric mRNA	Mohammad Ali Takhshid,	Medical	
	Service		Containing Human Beta-Globin 5' and 3'	Mohammad Reza Miri, Gholamreza	Biotechnology. 11,	
			Untranslated Regions	Rafiei Dehbidi, Ali Farhadi, Reza	112-117	
				Ranjbaran, Parnian Alavi, Negin		
				Nikouyan, Noorossadat Seyyedi,		
				Samaneh Naderi, Alireaz Eskandari,		
				and Abbas Behzad-Behbahani		
33	Gene	2019	Prevalence of hepatitis E virus in thalassemia	Najmeh Dalvand, Azadeh Dalvand,	Iranian Journal of	1.22
	Synthesis		patients with hepatitis C in Tehran, Iran	Zohreh Sharifi, and Seyed Masoud	Microbiology. 11,	
	Service			Hosseini	535-540	
34	Gene	2019	A New ELISA Kit Based on Antigenic Epitopes	Tannaz Khodabakhsh, Azin Arabi,	Microbiology and	0.36
	Synthesis		for Diagnosing <i>Brucella abortus</i>	Parviz Pakzad, ShivaSadat Gheflat,	Biotechnology	
	Service			Akram Bahreinipour, and Mojgan	Letters. 47, 158-163	
				Bandehpour		
35	Gene	2019	Expression of an epitope-based recombinant	Maziar Habibi-Pirkoohi, Saeid	Journal of Plant	
	Synthesis		vaccine against Foot and Mouth Disease	Malekzadeh-Shafaroudi, Hasan	Molecular Breeding.	
	Service		(FMDV) in tobacco plant (<i>Nicotiana tabacum</i>)	Marashi, and Afsaneh Mohkami	<i>7,</i> 1-9	



36	Gene	2019	Diet-responsive Transcriptional Regulation of	Ava Handley, Qiuli Wu, Tessa Sherry,	bioRxiv Preprint	
	Synthesis		Insulin in a Single Neuron Controls Systemic	and Roger Pocock		
	Service		Metabolism			
37	Cloning	2019	MicroRNA-126-3p inhibits the proliferation,	Zhipeng Hong, Chengye Hong, Bo	Oncology Reports.	3.417
	Service		migration, invasion, and angiogenesis of	Ma, Qinglan Wang, Xi Zhang,	<i>42</i> , 1569-1579	
			triple-negative breast cancer cells by	Liangqiang Li, Chuan Wang Debo,		
			targeting RGS3	and Chen		