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LIST OF ABBREVIATIONS

AMV		Avian myeloblastosis virus
bp		Base pair
cDNA		Complementary deoxyribonucleic acid
CDRs		Complementarity determining regions
CO_2		Carbon dioxide
CS		Constant Spring
DNA		Deoxyribonucleic acid
dNTP	8	Deoxynucleotide triphosphate
E. coli	10	Escherichia coli
EDTA	30%	Ethylenediaminetetraacetic acid
ELISA	-283-	Enzyme linked immunosorbent assay
FBS		Fetal bovine serum
Fc	NE1	Constant fragment of immunoglobulin
Fv	NE.	Variable fragment of immunoglobulin
g	Nº2	Gram
GST		Glutathione-S-transferase
h		Hour
Hb	S	Hemoglobin
His	adansi	Histidine
HRP	Copyright ⁽	Horseradish peroxidase
IBs	ALL	Inclusion bodies
IEF		Isoelectric focusing
Igs		Immunoglobulins
IMAC		Immobilized metal affinity chromatography
IMDM		Iscove's Modified Dulbecco's Medium
IPTG		Isopropyl-β-D-thiogalactopyranoside
K_a		Affinity constant

kb	Kilobase
kDa	Kilodalton
L	Liter
LB	Luria Bertani
М	Molar
mAb	Monoclonal antibody
MCH	Mean corpuscular hemoglobin
MCV	Mean corpuscular volume
MED	Mediterranean
mg	Milligram
min 🖌 🔊	Minute
mL	Milliliter
mM	Millimolar
μg	Microgram
μL	Microliter
μM	Micromolar
N	Normality
Ni-NTA	Nickle-nitrilotriacetic acid
nm	Nanometer
OD	Optical density
PAGE	Polyacrylamide gel electrophoresis
PBS Salansi	Phosphate buffer saline
PBS-T	Phosphate buffer saline-Tween 20
PCR Copyright	Polymerase chain reaction
PMSF A	Phenylmethyl sulfonyl fluoride
PVDF	Polyvinylidene difluoride
RBC	Red blood cell
RFLP	Restriction fragment length polymorphism
RNA	Ribonucleic acid
rpm	Revolution per minute
RT-PCR	Reverse transcriptase polymerase chain reaction
S	Second

ScFv	Single-chain variable fragment
SDS	Sodium dodecyl sulfate
SEA	Southeast Asia
SOE-PCR	Splice overlapped extension-polymerase chain reaction
TAE	Tris-acetate-EDTA buffer
TMB	3, 3', 5, 5'-Tetramethylbenzidine
Trx	Thioredoxin
UV	Ultraviolet
V	Voltage
V _H	Variable domains of immunoglobulin heavy chain
VL	Variable domains of immunoglobulin light chain
5.	
2	C C S S S S S S S S S S S S S S S S S S



ข้อความแห่งการริเริ่ม

- ศึกษารูปแบบพันธุกรรมและความชุกที่เป็นปัจจุบันของโรคอัลฟาธาลัสซีเมียในหญิงตั้งครรภ์ ท้องแรกที่มีภูมิลำเนาอยู่ในภาคเหนือของประเทศไทยด้วยวิธีแก็ปพีซีอาร์และพีซีอาร์-อาร์เอฟแอลพี
- รีกอมบิแนนท์แอนติบอดีชนิดเอสซีเอฟวีที่จำเพาะต่อฮีโมโกลบินบาร์ทส์ถูกสร้างขึ้นใหม่ด้วย เทคโนโลยีรีกอมบิแนนท์ดีเอ็นเอเพื่อใช้ทดแทนโมโนโกลนอลแอนติบอดีเป็นการแก้ปัญหา เซลล์ไฮบริดโดมาที่อาจสูญเสียความสามารถในการสร้างและหลั่งโมโนโคลนอลแอนติบอดี เมื่อเลี้ยงเซลล์เป็นเวลานาน



STATEMENTS OF ORIGINALITY

- 1. Common genotypes and update data of the prevalence of α -thalassemias were determined in northern Thai primigravidarum by gap-PCR and PCR-RFLP.
- A novel recombinant scFv antibody specific to Hb Bart's was generated using recombinant DNA technology as an alternative to monoclonal antibody dissolving the problems of gradual loss of the synthesis and secretion of monoclonal antibody during long-term cultivation of the hybridimas.

