遗传学报 2006 33(12) 354-364 ISSN: 0379-4172 CN: 11-5418/R

微生物遗传学

SARS病毒基因组的多态性

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收稿日期 2005-4-04 修回日期 2005-9-1 网络版发布日期 2006-4-6 接受日期

摘要

2003年5月,北京爆发了非典(SARS)疫情。经国内外科研机构(1)(2)(3)(4)(5)(6)(7)(8)(9)(10)(11)(12)(13)(14)(15)(16)(17)(18)(19)(20)(21)(22)(23)(24)(25)(26)(27)(28)(29)(30)(31)(32)(33)(34)(35)(36)(37)(38)(39)(40)(41)(42)(43)(44)(45)(46)(47)(48)(49)(50)(51)(52)(53)(54)(55)(56)(57)(58)(59)(60)(61)(62)(63)(64)(65)(66)(67)(68)(69)(70)(71)(72)(73)(74)(75)(76)(77)(78)(79)(80)(81)(82)(83)(84)(85)(86)(87)(88)(89)(90)(91)(92)(93)(94)(95)(96)(97)(98)(99)(100)(101)(102)(103)(104)(105)(106)(107)(108)(109)(110)(111)(112)(113)(114)(115)(116)(117)(118)(119)(120)(121)(122)(123)(124)(125)(126)(127)(128)(129)(130)(131)(132)(133)(134)(135)(136)(137)(138)(139)(140)(141)(142)(143)(144)(145)(146)(147)(148)(149)(150)(151)(152)(153)(154)(155)(156)(157)(158)(159)(160)(161)(162)(163)(164)(165)(166)(167)(168)(169)(170)(171)(172)(173)(174)(175)(176)(177)(178)(179)(180)(181)(182)(183)(184)(185)(186)(187)(188)(189)(190)(191)(192)(193)(194)(195)(196)(197)(198)(199)(200)(201)(202)(203)(204)(205)(206)(207)(208)(209)(210)(211)(212)(213)(214)(215)(216)(217)(218)(219)(220)(221)(222)(223)(224)(225)(226)(227)(228)(229)(230)(231)(232)(233)(234)(235)(236)(237)(238)(239)(240)(241)(242)(243)(244)(245)(246)(247)(248)(249)(250)(251)(252)(253)(254)(255)(256)(257)(258)(259)(260)(261)(262)(263)(264)(265)(266)(267)(268)(269)(270)(271)(272)(273)(274)(275)(276)(277)(278)(279)(280)(281)(282)(283)(284)(285)(286)(287)(288)(289)(290)(291)(292)(293)(294)(295)(296)(297)(298)(299)(300)(301)(302)(303)(304)(305)(306)(307)(308)(309)(310)(311)(312)(313)(314)(315)(316)(317)(318)(319)(320)(321)(322)(323)(324)(325)(326)(327)(328)(329)(330)(331)(332)(333)(334)(335)(336)(337)(338)(339)(340)(341)(342)(343)(344)(345)(346)(347)(348)(349)(350)(351)(352)(353)(354)(355)(356)(357)(358)(359)(360)(361)(362)(363)(364)(365)(366)(367)(368)(369)(370)(371)(372)(373)(374)(375)(376)(377)(378)(379)(380)(381)(382)(383)(384)(385)(386)(387)(388)(389)(390)(391)(392)(393)(394)(395)(396)(397)(398)(399)(400)(401)(402)(403)(404)(405)(406)(407)(408)(409)(410)(411)(412)(413)(414)(415)(416)(417)(418)(419)(420)(421)(422)(423)(424)(425)(426)(427)(428)(429)(430)(431)(432)(433)(434)(435)(436)(437)(438)(439)(440)(441)(442)(443)(444)(445)(446)(447)(448)(449)(450)(451)(452)(453)(454)(455)(456)(457)(458)(459)(460)(461)(462)(463)(464)(465)(466)(467)(468)(469)(470)(471)(472)(473)(474)(475)(476)(477)(478)(479)(480)(481)(482)(483)(484)(485)(486)(487)(488)(489)(490)(491)(492)(493)(494)(495)(496)(497)(498)(499)(500)(501)(502)(503)(504)(505)(506)(507)(508)(509)(510)(511)(512)(513)(514)(515)(516)(517)(518)(519)(520)(521)(522)(523)(524)(525)(526)(527)(528)(529)(530)(531)(532)(533)(534)(535)(536)(537)(538)(539)(540)(541)(542)(543)(544)(545)(546)(547)(548)(549)(550)(551)(552)(553)(554)(555)(556)(557)(558)(559)(560)(561)(562)(563)(564)(565)(566)(567)(568)(569)(570)(571)(572)(573)(574)(575)(576)(577)(578)(579)(580)(581)(582)(583)(584)(585)(586)(587)(588)(589)(590)(591)(592)(593)(594)(595)(596)(597)(598)(599)(600)(601)(602)(603)(604)(605)(606)(607)(608)(609)(610)(611)(612)(613)(614)(615)(616)(617)(618)(619)(620)(621)(622)(623)(624)(625)(626)(627)(628)(629)(630)(631)(632)(633)(634)(635)(636)(637)(638)(639)(640)(641)(642)(643)(644)(645)(646)(647)(648)(649)(650)(651)(652)(653)(654)(655)(656)(657)(658)(659)(660)(661)(662)(663)(664)(665)(666)(667)(668)(669)(670)(671)(672)(673)(674)(675)(676)(677)(678)(679)(680)(681)(682)(683)(684)(685)(686)(687)(688)(689)(690)(691)(692)(693)(694)(695)(696)(697)(698)(699)(700)(701)(702)(703)(704)(705)(706)(707)(708)(709)(710)(711)(712)(713)(714)(715)(716)(717)(718)(719)(720)(721)(722)(723)(724)(725)(726)(727)(728)(729)(730)(731)(732)(733)(734)(735)(736)(737)(738)(739)(740)(741)(742)(743)(744)(745)(746)(747)(748)(749)(750)(751)(752)(753)(754)(755)(756)(757)(758)(759)(760)(761)(762)(763)(764)(765)(766)(767)(768)(769)(770)(771)(772)(773)(774)(775)(776)(777)(778)(779)(780)(781)(782)(783)(784)(785)(786)(787)(788)(789)(790)(791)(792)(793)(794)(795)(796)(797)(798)(799)(800)(801)(802)(803)(804)(805)(806)(807)(808)(809)(810)(811)(812)(813)(814)(815)(816)(817)(818)(819)(820)(821)(822)(823)(824)(825)(826)(827)(828)(829)(830)(831)(832)(833)(834)(835)(836)(837)(838)(839)(840)(841)(842)(843)(844)(845)(846)(847)(848)(849)(850)(851)(852)(853)(854)(855)(856)(857)(858)(859)(860)(861)(862)(863)(864)(865)(866)(867)(868)(869)(870)(871)(872)(873)(874)(875)(876)(877)(878)(879)(880)(881)(882)(883)(884)(885)(886)(887)(888)(889)(890)(891)(892)(893)(894)(895)(896)(897)(898)(899)(900)(901)(902)(903)(904)(905)(906)(907)(908)(909)(910)(911)(912)(913)(914)(915)(916)(917)(918)(919)(920)(921)(922)(923)(924)(925)(926)(927)(928)(929)(930)(931)(932)(933)(934)(935)(936)(937)(938)(939)(940)(941)(942)(943)(944)(945)(946)(947)(948)(949)(950)(951)(952)(953)(954)(955)(956)(957)(958)(959)(960)(961)(962)(963)(964)(965)(966)(967)(968)(969)(970)(971)(972)(973)(974)(975)(976)(977)(978)(979)(980)(981)(982)(983)(984)(985)(986)(987)(988)(989)(990)(991)(992)(993)(994)(995)(996)(997)(998)(999)(1000)(1001)(1002)(1003)(1004)(1005)(1006)。应用比较基因组科学的方法对Genbank中公布的116株SARS-CoV基因组序列以及B202进行分析。116株SARS-CoV基因组中可编码分布。大约一半变异位点(50.4%, 140/278)发生在基因组3' 末端1/3区域, 编码orf10-11, Orf14, E蛋白, M蛋白和S蛋白。其中, 有两个位点(13 804, 15 931和20 760)以及其邻近的两个多态位点(12 884, 15 933和20 762)以及其邻近的两个多态位点(26 428, 26 477和27 243)均检出两种不同核苷酸。检出14 379位点的一个多态位点(13 884)在这两个多态位点(26 428, 26 477和27 243)中的位置不同, 但是其邻近的两个多态位点(13